

ANNUAL REPORT 2011-12

(FOR THE PERIOD APRIL 2011 TO MARCH 2012)

KRISHI VIGYAN KENDRA (VILLUPURAM)

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 2011 to March 2012
	Last date of receiving the soft copy through email to ZPD VIII is 30 th April 2012 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 Tamil Nadu Agricultural University Tindivanam, Villupuram District – 604 002	04147 250001 04147250002	04147 250001	kvktvm@tnau.ac.in kvktvm@yahoo.co.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	0422 6611233	091-0422- 6611433	dee@tnau.ac.in vctnau@tnau.ac.in	www.tnau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr.N.Sathiah	09442433393	09994966060	nsathiah@gmail.com

1.4. Year of sanction: 2003-04 (No.16-12/2003-AE-I-dated 16.8.2003, AE-I-dated 22.3.04 from ICAR, New Delhi)

1.5. Staff Position (as 31st March 2012)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr.N.Sathiah	Professor and Head	M	Agricultural Entomology	Ph.D	37400-67000+AGP10000	49010+10000	16.04.2010	Permanent	OC
2.	SMS	Dr.M.Renuga	Assistant Professor	F	Horticulture	Ph.D	15600-39100+AGP7000	22830+7000	05.08.2009	Permanent	SC
3.	SMS	Dr.K.Natarajan	Assistant Professor	M	Seed Technology	Ph.D	15600-39100+AGP6000	19600+6000	30.12.2009	Permanent	MBC
4.	SMS	Dr.V.Sendhilvel	Assistant Professor	M	Plant Pathology	Ph.D	15600-39100+AGP6000	19600+6000	30.12.2009	Permanent	BC
5.	SMS	Dr.S.Ramesh	Assistant Professor	M	Agronomy	Ph.D	15600-39100+AGP6000	19600+6000	01.06.2011	Permanent	BC
6	SMS	Dr.R.Uma Sankareswari	Assistant Professor	F	Agricultural Microbiology	Ph.D	15600-39100+AGP6000	19600+6000	31.12.2009	Permanent	ST
7	SMS	Dr.P.C.Prabu	Assistant Professor	M	Environmental Science	Ph.D	15600-39100+AGP6000	19600+6000	06.01.2010	Permanent	BC
8	Programme Assistant(Lab Tech.)/T-4	Mrs. A.Kalyani	Programme Assistant	F	HSC	-	5400-2020-2800-	11250+2800	01.03.2012	Permanent	BC
9	Programme Assistant (Computer)/ T-4	Tmt.M.Selvi	Programme Assistant (Computer)	F	Computer Science	MCA	9300-34800-4400	11130+4400	03.12.2008	Permanent	OC
10	Programme Assistant/ Farm Manager	Tmt.A.Amudha	Farm Manager	F	Agronomy	M.Sc	9300-34800-4400	11600+4400	06.06.2007	Permanent	SC
11	Assistant	Th.R.Srinivasan	Superintendent	M	-	MA	9300-34800+4800	11390+4800	16.03.2012	Permanent	OC
12	Jr. Stenographer	Th.D.Amirthalingam	Stenographer	M	-	-	5200+20200+2000	6660+2400	09.08.2010	Permanent	MBC
13	Driver	Th.R.Mohan	Driver	M	-	-	5200-20200+2000	6710+2400	01.04.2009	Permanent	MBC
14	Driver	Th.P.Raja	PUSM	M	-	-	4800-10000+1300	6590+1300	01.03.2006	Permanent	MBC
15	Supporting staff	Th.K.Uthiramoorthy	PUSM	M	-	-	4800-10000+1300	6730+1300	26.03.2010	Permanent	MBC
16	Supporting staff	Th.G.Subramanian	PUSM	M	-	-	4800-10000+1300	70000+1300	25.07.2007	Permanent	MBC

1.6. Total land with KVK (in ha) : 16.8 ha

S. No.	Item	Area (ha)
1	Under Buildings	2.4
2.	Under Demonstration Units	160m2
3.	Under Crops	10
4.	Orchard/Agro-forestry	2.8
5.	Others	

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.in lakhs)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	1.8.2007	550	39.85	1.7.2006	550	Completed
2.	Farmers Hostel	ICAR	1.8.2007	305	25.75	1.7.2006	305	Completed
3.	Staff Quarters	ICAR	1.8.07	400	32.00	1.7.06	400	Completed
	1							
	2							
	3							
	4							
	5							
	6							
4.	Demonstration Units	ICAR	1.8.07	40	4.00	1.7.06	160	Completed
	1							
	2							
	3							
	4							
5	Fencing	ICAR	1.8.07	250m	2.00	1.7.06	-	Completed
6	Rain Water harvesting system							
7	Threshing floor							
8	Farm godown							
9								
10								

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Jeep	2004	4,91,852	66743	condemned
Tractor with accessories	2005	4,96,553		Good
Two wheeler (TVS Starcity)	2006	35,371	27850	Good
Two wheeler (TVS Scooty pep+)	2009	34027	10675	Good
Power tiller	2010	1,49,528	-	Good

C)Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
OHP with accessories	2004	24,850	Good
Slide projector with accessories	2006	24,730	Good
Xerox machine	2006	74,630	Good
Computer with accessories	2006	74,950	Good
Digital camera with accessories	2007	20,000	To be condemned
Computer accessories including LCD	2007	1,00,000	Good
Plant Health diagnostic facility			

Crop physiology component			
BOD Incubator + Stabilizer-Pricillab	2011	42432	Good
pH Meter-Elico	2011	5481	Good
Dessicator-Kasablanca	2011	2564	Good
Entomology Component			
Stereozoom microscope-Olympus	2011	85306	Good
Magnifier-Ajay	2011	5834	Good
Hot air oven-Pricillab	2011	19448	Good
Deep freezer-Voltas	2011	24752	Good
Horticulture			
UPS -Microtek with backup exide	2011	26520	Good
Glass distillation apparatus+ RO system (Pricillab+Dolphin)	2011	38896	Good
Polarimeter-Erma	2011	2386.8	Good
Labsetup			
Wall table-Pricillab	2011	62764	Good
Sink with table	2011	10608	Good
Wall cupboard-4	2011	22100	Good
Revolving stool-4	2011	8840	Good
Electrical installation-12	2011	10608	Good
Air conditioner 2.0 t-LG+stabilizer	2011	26520	Good
Vertical louver-5	2011	13260	Good
Separator	2011	15028	Good
Refrigerated centrifuge-Biolab	2011	139672	Good
Pathology Component	2011		Good
Microwave oven-LG 8 lit	2011	7514	Good
Analytical balance 200g-Wensar	2011	29172	Good
Thermohygrometer-Lutron	2011	751	Good
Colony counter-Hintron	2011	4950	Good
Autoclave-35lit-Obramax	2011	43316	Good
Laminar air flow-Pricillab	2011	30940	Good
Vortex mixer-Biolab	2011	4066	Good
Shaker-Pricillab	2011	15028	Good
Waterbath-Pricillab	2011	5392	Good
Portable autoclave-Obramax	2011	5304	Good
Hot plate-induction-Prestige	2011	3094	Good
Magnetic stirrer-Pricillab	2011	3094	Good
Seed Technology component			
UV chamber-Pricillab	2011	11404	Good
Digital moisture meter-Concord	2011	7514	Good
Display cabinet 3=15	2011	29172	Good
Cold water supplier-Voltas	2011	11315	Good
Soil and water testing laboratory			
Slotted angle iron rack	2011	4508	Good
Steel almirah	2011	23134	Good
Revolving stool	2011	2121.6	Good
RO System-Dolphin	2011	7956	Good
Airconditioner+ V. Stabilizer-LG+V guard	2011	25194	Good
Vertical Louver-4	2011	10608	Good
Vacuum cleaner-Eureka Forbes	2011	3536	Good
Sink unit	2011	19121	Good
Exhaust fan	2011	12730	Good
LPG Setup	2011	8398	Good
Wall storage cupboard-Pricillab	2011	5525	Good
Wall side storage-Pricillab	2011	5525	Good
Storage cabinet-Pricillab	2011	46630	Good
Cabinet for conditioned storage of samples-LG+V guard	2011	10608	Good
Stabilizer	2011		Good
GPS Garmin-E Trex	2011	17680	Good
Servo Stabilizer-2KVA	2011	6630	Good

1.8. Details SAC meeting conducted in 2011-12

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

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
a)	Wetland Rice -Rice -Sesame (June-July) (Aug-Sep) (March-April) Rice -Rice fallow pulses (Aug-Sept) (Jan-Mar) Sugarcane (Dec-Jan)
b)	Gardenland Groundnut -Groundnut -Sesame (June-Sept) (Oct-Jan) (Feb-March)
c)	Dryland Groundnut -Groundnut /Sesame/Pulses (June-Sept) (Oct-Jan)
d)	Othercrops Cotton, tapioca,cashew, chillies,watermelon,brinjal,gourds,crossandra,jasmine,banana, coconut, mango, guava, casurina
e)	Other enterprises EDP-Home products, toymaking, turmeric, flower crop and agro-forestry nursery, cashew processing, dairy farming, goat and sheep rearing.

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	<p>The District is situated between 8 5' and 13 2' of north latitudes and 15' and 80 22' east longitudes. The mean annual rainfall 1120 mm is received in 63 rainy days. The north eastern season provides maximum amount of 601 mm rainfall in 29 rainy days followed by southwest monsoon contributing 294 mm in 24 rainy days.</p> <p>The major soil types are red loam and clay loam. Black soils are present in limited extent and coastal alluvial soils occur along the sea coast. In coastal taluks have saline and alkaline soils of about 12,000 ha. They are distributed in patches.</p> <p>The climate in the Zone is basically semi arid tropical. The hottest months are April-June and the cold climate prevails during December and January. The average maximum temperature varies from 19.5C to 24.8C. It has a wet period of 7 months and dry period of 5 months in a year. The relative humidity is highest during the months of October- November.</p> <p>The ground water is available at a depth of 12-13mm from the ground surface in many locations (dry land areas). Therefore, it is possible to get water if necessary for tree crops during summer, for protective water supply. In the coastal areas, water logged /swampy area with saline water is seen and such areas can be properly used by suitable agro forestry programmes.</p>

S. No	Agro ecological	Characteristics
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	situation	
1	North Eastern Zone	1. Red non calcareous – Low rainfall – Low Elevation 2. Red non calcareous – Low rainfall – Medium Elevation 3. Red non calcareous – Medium rainfall – Low Elevation 4. Red non calcareous – Medium rainfall –Medium Elevation 5. Red non calcareous – High rainfall – Low Elevation 6. Red calcareous – Low rainfall – Low Elevation 7. Red calcareous – Low rainfall – Medium Elevation 8. Red calcareous – Medium rainfall – Low Elevation 9. Red calcareous – Medium rainfall –Medium Elevation 10. Red calcareous – High rainfall – Low Elevation 11. Black non calcareous – Medium rainfall – Low Elevation 12. Black non calcareous – Medium rainfall – Medium Elevation 13. Black calcareous – Low rainfall – Medium Elevation 14. Black calcareous – Medium rainfall – Low Elevation 15. Black calcareous – Medium rainfall – Medium Elevation 16.Coastal saline alkaline and swamp – Medium rainfall – Low Elevation

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Brown soil	Soil colour is brown. The texture ranges from sandy loam to slity loam. The soils are medium depth with good drainage.	167072
2	Red soil	The texture is usually loamy. Colour varies from red at the surface to yellow at the lower horizon. The soils are of medium depth with good drainage, free from accumulation of salt and calcium carbonate, PH ranging from 6.05 to 8.0 and contains amount of organic matter, nitrogen and phosphorous but generally adequate amount of potash and lime.	53399
3	Black soil	Soils are either shallow or deep up to 5m. These are highly argillaceous (30% clay). Deep cracks summer due to shrinkage on drying. They contain high amount of iron, calcium and magnesium.	26136
4	Alluvial soil	They occur along the coastal line. They origin may be sedimentary or formed by the rivers over laid with sand glow from sea beaches.	1965

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

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

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Paddy	145403	480329	3303.4
2	Cholam	2934	3081	1050.10
3	Cumbu	15172	17242	1136.43
4	Ragi	945	1948	2061.37
5	Maize	3422	12739	3722.26
6	Other cereals	2123	2533	1193.12
7	Red gram	273	724	2652.0
8	Green gram	581	1065	1833.04
9	Blackgram	18922	31613	1670.00
10	Sugarcane	56698	5787278	102.07(tones)
11	Groundnut	55317	132891	2402.35
12	Gingelly	5012	2648	528.33
13	Cotton	7014	20178	2876.81

Crop and Season report from JDA office (2008-09) Villupuram

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2011	123	34.84	25.45	77.56
May 2011	12	38.13	28.67	67.4
June 2011	1.5	36.83	27.12	57.61
July 2011	65	27.9	27.4	85.8
August 2011	139.5	34.1	25.5	77.1
September 2011	222	29.7	23.1	89.2
October 2011	88.5	27.81	27.46	89.06
November 2011	258	34.2	24.7	81.6
December 2011	27	26.2	24.7	78.0
January 2012	-	27.1	26.4	75.1
February 2012	-	27.5	25.3	14.2
March 2012	-	31.2	28.8	63.8

(From KVK Automatic Weather station report)

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	154409	239294 tonnes	5.17 kg/day
<i>Indigenous</i>	158777	78484 tonnes	1.65 kg/day
Buffalo	22152	16437 tonnes	2.47 kg/day
Sheep			
<i>Crossbred</i>	365307		
<i>Indigenous</i>			
Goats	495223		
Pigs	30205		
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits	130		
Poultry			
Hens	772090	246.2 lakhs	132 eggs/year
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			
Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

From Regional Director of Animal husbandry office ,Villupuram.

2.7 District profile has been **Updated** for 2011-12 No:

2.8 Details of Operational area / Villages

Sl. No	Taluk	Name of the block	Name of the village	Duration of covered under operational area of the KVK	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Villupuram	Vikravandi Koliyanur Valavanur Kondangi	Asur Sithani Veedur Pidagam Kedelam	1	Paddy Sugarcane and Groundnut Mango Fodder Pulses Fisheries	<ol style="list-style-type: none"> 1.Labor Shortage 2.Terminal drought in paddy 3. Biological control of pest and disease 4. Lack of availability of certified seeds 5. Drought 6. Unavailability of compost 7. Storage pests for seeds 8. Reduction of the soil fertility and poor growth of crops 9. Lack of knowledge on nursery techniques in vegetables viz., protray method 10.Lack of knowledge on integrated disease management for redroot of sugarcane 11.Lack of awareness on growth regulators 12.Lack of knowledge on fodder bank and agrisylvi pasture system 13.Lack of knowledge on foliar application of nutrients and growth regulators 14.Lack of knowledge on integrated disease management for redroot of sugarcane 15.Poor organic matter in soil 16.Lack of awareness on IPM in Groundnut 17.Training on fish farming 	<ol style="list-style-type: none"> 1.Farm Mechanization 2.Bio fertigation 3.Biological control of pests and diseases, IPM 4.Sustainable agriculture by IFS and resource conservation 5.Seed Production techniques 6.Drought management 7.Bio composting 8.Organic farming 9.Seed storage techniques 10.Empowerment of rural youth for self employment by vocational trainings

2.	Tindivanam	Marakanam Mailam Olakkur	Nadukuppam Nallavur Chendur Kattusivri Andapattu Ural Mariamangalam		Paddy Vegetables Watermelon Casurina Small industries Coconut Goat rearing Flower crops (Jasmine, ,Crossandra and Tuberrose)	<ol style="list-style-type: none"> 1.Lack of knowledge on foliar application of nutrients and growth regulators 2.Yield reduction due to pest and disease damage 3.Uneven income and wasting of farm By products 4.Lack of knowledge on seed production Techniques 5. Ignorance of pruning Techniques 6. Domestic goat and poultry 7.Lack of knowledge of insemination Method 8. Coastal saline soil 	<ol style="list-style-type: none"> 1.Crop management in watermelon 2.Crop production techniques in Mango 3.Nursery production of coconut seedlings 4.IPM in flower crops 5.Pruning techniques 6.Flower arrangements- bouquet preparation 7.Artificial insemination in goats Campaign on cattle disease management 8.Sylvipastoral system
3.	Ulunderpet	Ulunderpet	Mampakam		Groundnut Banana Sugarcane	<ol style="list-style-type: none"> 1. Uneven distribution of rain and over exploitation of ground water 2.Yield reduction due to pest and disease damage 3.Uneven income and wasting of farm byproducts 4.Poor organic matter in soil 5.Reduction of the soil fertility and poor growth of crops 6.Pest and disease problem in sugarcane 7.Lack of knowledge on integrated disease management for redrot of sugarcane 	<ol style="list-style-type: none"> 1.Drought management 2.Biological control of pests and diseases, IPM 3.Sustainable agriculture by IFS and resource conservation 4.Seed Production techniques 5.Drought management 6.Bio composting 7.Organic farming 8.Seed storage techniques

4.	Thirukoilur	Thirukoilur	Manampooni		Sugarcane Paddy Chillies Brinjal	<ol style="list-style-type: none"> 1. Lack of knowledge on hybrid seed production in paddy 2. Water scarcity 3. Labour shortage 4. Lack of knowledge on Fertigation 5. Lack of knowledge on micro irrigation 6. Zinc deficiency in paddy 7. Red rot problem in sugarcane 8. Ignorance of biofertilizer 9. Shoot and fruit borer in brinjal 10. Ignorance of advanced nursery techniques 11. Lack of knowledge on pro tray method of nursery 	<ol style="list-style-type: none"> 1. Training on hybrid seed production technology 2. Micro irrigation 3. Drought management 4. Farm mechanization 5. Biofertilization 6. Foliar application of zinc for paddy 7. Integrated disease management for redroot 8. Awareness on biocontrol 9. Nursery techniques in vegetables 10. Liquid biofertilizer 11. Management techniques for shoot and fruit borer
5.	Vanur		Thailapuram Nallavur Avaiyarkuppam		Watermelon Casuarina Vegetables Coconut Groundnut Mango Sugarcane Paddy Brinjal Maize Crossandra	<ol style="list-style-type: none"> 1. Lack of knowledge on crop improvement in watermelon and post harvest 2. Shortage of watermelon seed 3. Scarcity of water 4. Lack of knowledge on vegetable cultivation 5. Helicoverpa problem in groundnut 6. Flower bearing in mango 7. Labour shortage 8. Lack of seed treatment 9. Conventional method of seedling multiplication 10. Lack of awareness on newer poultry breeds 11. Nematode wilt complex in crossandra 12. Lesser economic returns in dairy 13. Poor on-farm management of solid wastes 14. Lack of knowledge on growth promoters in water melon 	<ol style="list-style-type: none"> 1. Popularization of high yielding variety of watermelon and cultivation methods 2. Drought management by drip irrigation 3. IPM groundnut 4. Liquid biofertilizer for INM 5. Popularization of guinea, rhodowhite and Nandanam turkey 6. Vermicompost production' 7. Valu addition in milk 8. Use of biofertilization in watermelon

6.	Kalla kurichi		Kalayara yan hills Pakkamp adi Kalababu sumidhra m		Paddy Sugarcane Cotton Coleus Small millets Yam Turmeric Tapioca Semia Company Curry leaf Brinjal Tomato Goat rearing	<ol style="list-style-type: none"> 1. Labour shortage 2. Pest and disease problem in all major crops 3. Nutrient disorders in paddy 4. Lack of awareness of new variety 5. Lack of awareness of biological control on paddy and sugarcane 6. Non availability of knowledge on seed production (Paddy, groundnut and pulses) 7. Lack of knowledge on seed treatment 8. Limited knowledge on storage method in turmeric 9. Lack of awareness on fodder crops 10. Lack of knowledge of artificial insemination methods 11. Lack of exposure on biofertilizer application 12. Lack of knowledge on drought management techniques 13. Non practice of Organic farming 14. Unemployment of youth 	<ol style="list-style-type: none"> 1. Farm mechanization 2. Biofertilization 3. Biological control of pest and disease 4. Sustainable agriculture by IFS 5. Seed Production techniques 6. Drought management 7. Biocomposting 8. Organic farming training 9. Storage techniques 10. Empowerment of rural youth for self employment 2006 11. Post harvest processing in curry leaf 12. Protein Navathania Balls
7.	Sankara puram		Rishi vanthiya m		Paddy Sugarcane Cotton Maize Ragi Gingelly Pulses Vegetables Flower crops	<ol style="list-style-type: none"> 1. Labour shortage 2. Pest and disease problem in major crops 3. Nutrient disorders in paddy 4. Lack of awareness of new variety 5. Lack of awareness of biological control on paddy and sugarcane 6. Unavailability of knowledge on seed production (Paddy, groundnut and pulses) 7. Lack of knowledge on seed treatment 8. Limited knowledge on storage method 9. Lack of awareness on fodder crops 10. Lack of knowledge of artificial insemination methods 11. Lack of exposure on biofertilizer application 12. Lack of knowledge on drought management techniques 13. Non practice of organic farming 14. Unemployment of youth 15. Lack of knowledge on pest and disease management in flower crops 	<ol style="list-style-type: none"> 1. Farm mechanization 2. Bio Fertilization 3. Biological control of pest and disease 4. Sustainable agriculture by IFS 5. Seed Production techniques 6. Drought management 7. Biocomposting 8. Organic farming training 9. Storage techniques 10. Empowerment of rural youth for self employment

8.	Gingee		Gingee Melmaliyanur Vallam		<p>Groundnut Sesamum Vegetables Goat rearing Paddy Sugarcane Pulses (blackgram) Watermelon Chillies</p>	<ol style="list-style-type: none"> 1. Pest and disease problem in major crops 2. Labour shortage 3. Nutrient disorders in paddy 4. Lack of awareness of new varieties 5. Lack of awareness of biological control on paddy and sugarcane 6. Lack of knowledge on seed production (Paddy, groundnut and pulses) 7. Lack of knowledge on seed treatment 8. Limited knowledge on storage method 9. Lack of awareness on fodder crops 10. Lack of knowledge of artificial insemination methods 11. Lack of exposure on biofertilizer application 12. Lack of knowledge on drought management techniques 13. Organic farming 14. Unemployment of youth 15. Value addition in Chillies and tomato-post harvest management
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2.9 Priority thrust areas

S. No	Thrust area
1	Farm Mechanization
2	Bio fertigation
3	Biological control of pests and diseases, IPM
4	Sustainable agriculture by IFS and resource conservation
5	Seed Production techniques
6	Drought management
7	Bio composting
8	Organic farming
9	Seed storage techniques
10	Empowerment of rural youth for self employment by vocational trainings
11	Crop management in watermelon
12	Training on fish farming
13	Sylvipastoral system
14	Soil reclamation
15	Crop production techniques in mango
16	Nursery production of coconut seedlings
17	IPM in flower crops
18	Pruning techniques
19	Flower arrangements- bouquet preparation
20	Artificial insemination in goats
21	Campaign on cattle disease management
22	Integrated pest management in cotton
23	Methods of transplanting in red gram
34	Value addition in milk and curry leaf
25	Vermi compost production
26	Micro irrigation
27	Integrated disease management for redrot of sugarcane
28	Nursery techniques in vegetables
29	Management techniques for shoot and fruit borer
30	IPM in Groundnut
31	Popularization of guinea, rhodowhite and Nandhanam turkey
32	Popularisation of high yielding variety of watermelon and cultivation methods
33	Preparation of Navathania balls
34	Tomato Squash preparation
35	Training on goat farming
36	Drought management
37	Bio composting
38	Organic farming
39	Seed storage techniques

PART III - TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	6	35	38	13	14	130	128

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
132	220	3300	8003	985	1262	14775	16749

Seed Production (Qtl.)			Planting materials (Nos.)	
5			6	
Target	Achievement		Target	Achievement
	30 Q		10000	18000

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
10	10		

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
1.	Crop Improvement	Paddy	Lack of awareness on new release and alternate variety for late samba	-	Popularization of paddy CO(R) 50 with IPT	3	-	-	4	200 kg CO 50 paddy seed	-	-	No. Azospirillum Phosphobacteria	Kg 2 kg 2 kg
2.	Farm mechanization	Paddy	Labour shortage	-	Popularization of mechanization in paddy cultivation	2	-	-	2	15 kg ADT 49 paddy seed ; 25 kg CO 50 seed	-	-	-	-
3	Integrated diseases management	Paddy	Lack of awareness on plant protection methods	Management of False smut in paddy	-	7	-	-	2	-	-	-	-	-
4.	Integrated crop management	Paddy	Lack of awareness on crop protection for problematic soil.	-	Popularisation of the Paddy TRY 3 for problematic soil	6	-	-	2	-	-	-	-	-
5.	Crop Improvement	Paddy	Low yield and Lack of awareness about the general attributes of the new release	-	Popularization of Anna(4) Paddy in drought prone area	2	-	-	3	400kg Anna(4) seed	-	-	<i>Pseudomonas fluorescens</i>	18
6.	Integrated crop management	Blackgram	Lack of awareness on introduced new technologies and boosters used for increasing productivity of crops	-	Integrated crop management in rabi pulses (Blackgram VBN 5)	2	-	-	2	60 kg	-	-	<i>Pseudomonas fluorescens</i> TNAU Pulse wonder	3kg 18 kg

7.	Drought tolerance induction in crops	Blackgram	Drought management practice is not followed	Foliar application of Methylobacterium on drought tolerance in pulses (Blackgram VBN5)	-	3	-	-	2	20 kg	-	-	<i>Pseudomonas fluorescens</i>	2 kg
8.	Integrated crop management	Blackgram	Improper nutrient and weed management and lack of alternate variety	-	Special technology demonstration for harnessing pulses productivity	6	-	--	7	Blackgram CO 6 seed 80 kg VBN 5 seed 30 kg	-	-	Rhizobium Phosphobacteria <i>P.fluorescens</i> TNAU Pulse wonder	6kg 3kg 6 kg 26kg
9.	Integrated Crop Management	Groundnut	Low yield, Growing of traditional varieties and adoption of conventional methods of cultivation	-	Integrated Crop Management in Groundnut	3	-	-	5	400kg Pod	-	-	Rhizobium Phosphobacterium <i>Psuedomonas fluorescens</i> Enriched FYM <i>Nomurea rileyi</i> Groundnut rich	5 5 7.5 35 1.0 13
10.	Impact of biodegradation with fungus	Sugarcane	Burning trashes in their field after harvesting crop	-	Biodegradation of sugarcane trashes with white rot fungus (<i>Pleurotus djmor</i>)	2	-	-	1		-	-	<i>Pleurotus djmor</i>	200 numbers of spawn
11.	Integrated nutrient management	Banana	Micronutrient related disorders in vertisol Poor nutrient management leads to low hand number and low yield Difficulties in preparation of spray fluid with 4 compounds	Foliar Nutrition for yield enhancement in Banana	-	-	-	-	2	-	-	-	Banana sakthi Banana special	100 50

12.	Nutrient management	Mango	Nutrient deficiency Poor fruit retention Low yield	-	Popularization of Growth regulator and nutrients application for fruit retention, yield and quality in mango	-	-	-	1	-	-	-	-	-
13.	Nutrient management	Jasmine	Nutrient deficiency Poor fruit retention Low yield	-	Growth regulators and micronutrients on flower induction in jasmine(gundu mali)	-	-	-	2	-	-	-	-	-
14	Crop improvement	Coriander	Lack of knowledge about new release Low yield due to non adoption of techniques	-	Popularization of CO (CR) 4 Coriander	-	-	-	2	Seed 20kg	-	-	<i>T.viride</i> Azospirillum Carabendazim	1kg 1.5kg 500kg
15.	Integrated disease management	Watermelon	Lack of awareness on plant protection methods	Biological control of watermelon wilt	-	5	-	-	2				<i>T.viride</i> <i>Psuedomonas fluorescens(Liquid)</i>	4 kg 10 l
16.	Livestock supplemental nutrition	Sorghum	Lack of availability of fodder	-	Popularization of Sorghum Co 30 variety for dual purpose	2	-	-	2	-	-	-	-	-
17.	Livestock supplemental nutrition	Fodder	Lack of availability of fodder	-	Popularization of fodder bank at village level	2			2		-	-	-	-
18.	Poultry management	Poultry	Poor hatchability percentage in traditional method and lack of awareness about the incubator	-	Popularization of low cost incubator to increase hatchability percent for the viability of the technology	1	-	-	2	-	-	-	-	-

19.	Disease Management	Poultry	Unhygienic house keeping High mortality of population leading to economic loss Difficulties in administering the vaccine by farmers	Control of Ranikhet Disease in Desi Chicken	-	3	-	-	2	-	-	-	Lasota vaccine Oral Pellet vaccine RDVK vaccine	500 doses 20 boxes 500 doses
20	Livestock supplemental nutrition	Dairy cows	No supplemental mineral mixture	Area specific mineral mixture for dairy cows		3	-	-	2	Mineral mixture-120 kgs	-	-	-	-

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1.	Popularization of paddy CO(R) 50 with IPT	TNAU	Paddy	-	10	3	Booklet on seed production technologies in paddy were prepared. Message given to extension functionaries in the monthly zonal workshop. Seed production in instructional farm taken up during 2011-12. Farmers were sensitized on the superiority of CO 50 over BPT 5204
2.	Popularization of mechanization in paddy cultivation	TNAU	Paddy	-	6	2	Method demonstration arranged. Group meeting conducted.
3.	Management of False smut in paddy	TNAU	Paddy	5	-	7	Booklet on seed production technologies in paddy were prepared. Message given to extension functionaries in the monthly zonal workshop.
4.	Popularisation of the Paddy TRY 3 for problematic soil	TNAU	Paddy	-	6	6	Method demonstration arranged. Group meeting conducted.
5.	Popularization of Anna(4) Paddy in drought prone area	TNAU	Paddy	-	10	2	Message given to extension functionaries in the monthly zonal workshop. Seed production of Anna (4) was taken in the instructional farm t during 2011-12. Farmers were sensitized on the superiority of Anna (4) over traditional local variety in drought tolerance.

6.	Integrated crop management in rabi pulses (Blackgram VBN 5)	TNAU	Blackgram VBN 5	-	8	2	Method demonstration on preparation and application of TNAU pulse wonder and exhibition is arranged at V.Nergunam and kalithrampattu Village during Ulavar peruvizha and give pamphlets
7.	Foliar application of Methylobacterium on drought tolerance in pulses (Blackgram VBN5)	TNAU	Blackgram VBN 5	5	-	3	Method demonstration on preparation and application of Methylobacterium shown to TN-IAMWARM farmers of Villupuram district. Exhibition organised. Message given to extension functionaries in the monthly zonal workshop.
8.	Special technology demonstration for harnessing pulses productivity	TNAU	Blackgram	-	13	6	Booklet on blakgram production technologies. Leaflet on blakgram production technologies. Exhibition arranged. Method demonstration on post emergence herbicide application taken up. Message given to extension functionaries in the monthly zonal workshop. Technology provided to non project farmers in sponsored training programme. Message given to extension functionaries in the monthly zonal workshop. Seed production in instructional farm taken up during 2011-12
9.	Integrated Crop Management in Groundnut	TNAU	Groundnut	-	10	3	Method demonstration on seed drill sowing and bio-fertilizer seed treatment application were taken up. Message given to extension functionaries in the monthly zonal workshop. Technology provided to non project farmers in sponsored training programme. Seed production of TMV 13 in instructional farm was taken up during 2011-12
10.	Biodegradation of sugarcane trashes with white rot fungus (<i>Pleurotus djmor</i>)	TNAU	Sugarcane	-	10	2	Group meeting was conducted at Kondiyankuppam, Kedar village and regarding demonstration on biodegradation of sugarcane trashes and importance of <i>Pleurotus djmor</i> was given to the farmers.
11.	Foliar Nutrition for yield enhancement in banana	TNAU NRC,Banana, Trichy IIHR, Bangalore	Banana	5	-	3	Conducted demo on foliar application on micronutrients, Exposure visit

12.	Popularization of Growth regulator and nutrients application for fruit retention, yield and quality in mango	TNAU	Mango	-	5	5	Demo on mango grafting
13.	Growth regulators and micronutrients on flower induction in jasmine(gundu malli	TNAU	Jasmine	-	10	2	Conducted demo on foliar application of micronutrients and growth regulators Radio Talk on jasmine cultivation
14.	Popularization of CO (CR) 4 Coriander	TNAU	Coriander	-	10	1	Conducted demo on seed treatment with bio inoculants Radio Talk on coriander cultivation
15.	Biological control of the watermelon wilt	TNAU	Water melon	5	-	5	Field day was organized and the programme cocordinator visited the field and faremrs shared the Success stories of this technology
16.	Popularization of Sorghum Co 30 variety for dual purpose	TNAU	Sorghum	-	10	2	Message given to extension functionaries in the monthly zonal workshop. Technology provided to non project farmers in sponsored training programme.
17.	Popularization of fodder bank at village level	TNAU	Forages	-	10	2	Method demonstration arranged. Group meeting conducted. Seed materials produced at KVK instructional farm
18.	Popularization of low cost incubator to increase hatchability percent for the viability of the technology	TANUVAS	Poultry		10	1	Method demonstration arranged. Group meeting conducted.
19.	Control of Ranikhet disease in desi chicken	TANUVAS	Poultry	5	-	3	Exhibition organized. TN-IAMWARM farmers from Sivaganga and Pudukottai district visited OFT farm.
20.	Area specific mineral mixture for dairy cows	TANUVAS	Dairy cows	10	-	2	Message given to extension functionaries in the monthly zonal workshop. Farmers were senstitized on the use of mineral nutrition supplementation

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
-	-	-	-	7	2	1	-	97	12	16	13	-	-	-	-
-	-	-	-	6	-	-	-	78	2	37	3	-	-	-	-
5	-	-	-	-	-	-	-	85	23	26	12	-	-	-	-
-	-	-	-	6	-	-	-	73	13	17	-	-	-	-	-
-	-	-	-	8	-	2	-	61	10	9	5	-	-	-	-
-	-	-	-	7	1	-	-	15	5	-	-	-	-	-	-
5	-	-	-	-	-	-	-	47	13	-	-	-	-	-	-

-	-	-	-	12	-	1	-	227	85	64	22	-	-	-	-
-	-	-	-	8	-	2	-	75	17	18	9	-	-	-	-
-	-	-	-	5	-	5	-	23	-	8	-	-	-	-	-
5	-	-	-	-	-	-	-	21	5	3	1	-	-	-	-
-	-	-	-	5	-	-	-	58	35	9	9	-	-	-	-
-	-	-	-	10	-	-	-	41	1	4	7	-	-	-	-
-	-	-	-	10	-	-	-	19	-	2	-	-	-	-	-
5	-	-	-	-	-	-	-	65	32	14	8	-	-	-	-
-	-	-	-	10	-	-	-	22	14	-	-	-	-	-	-
-	-	-	-	10	-	-	-	15	8	-	-	-	-	-	-
-	-	-	-	5	3	2	-	10	20	5	5	-	-	-	-
4	1	3	-	-	-	-	-	20	5	8	2	-	-	-	-
7	3	-	-	-	-	-	-	19	15	8	5	-	-	-	-
31	4	3	-	109	6	13	-	1071	315	248	101	-	-	-	-

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

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

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	Banana	Foliar Nutrition for yield enhancement in banana	5	5	1
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management	Blackgram	Foliar application of Methylobacterium on drought tolerance in pulses (Blackgram VBN 5)	5	5	1
Integrated Disease Management	Paddy	Management of false smut in paddy	5	5	1
	Watermelon	Biological control of wilt in watermelon	5	5	1
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					

Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			20	20	4

4.B.2. Technologies Refined under various Crops

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

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management	Dairy cows	Area specific mineral mixture for dairy cows	10units	10
Disease management	Poultry	Control of Raniket disease in desi chicken	50 units	5
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				15

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

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

4.C1. Results of Technologies Assessed

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
	2	3	4	5	6	7	8	9	10	11	12
Paddy	Paddy-pulse-casuarina	Lack of awareness about disease and its management	Management of False smut in paddy	5	5	Yield Disease incidence BCR	<u>Disease incidence</u> Demonstration – 5.5 PDI Check – 43.4 PDI <u>Yield/ha:</u> Demonstration : 56.32 Q Check : 37.76 Q <u>BCR</u> Demonstration : 2.23 Check : 1.54	Seed treatment with carbendazim@2g/kg of seed and Spraying of hexaconazole @ 1ml/lit tillering and preflowering stage followed by Cholorothalanil 2g/lit at maturity stage was found be effective for the management of False smut disease in rice.	The disease was controlled and yield was increased		
Blackgram VBN5	Rainfed	Terminal drought occurrence to the extent of 20 -30% in and around Mailam block	Foliar application of Methylobacterium on drought tolerance in pulses (Blackgram VBN5)	5	<u>Technology 1:</u> No drought management practice is followed <u>Technology 2:</u> 1% KCl +100 ppm of boric acid spray <u>Technology 3:</u> Seed treatment & Foliar spray of Methylobacterium(1%) during preflowering and post flowering stage	<ul style="list-style-type: none"> Germination % No. of plants/m² No.of pods/plant Yield B CR 	<u>Technology 1:</u> 60% 2 plants/m ² 19 pods/plant Yield:4.25q/ha BCR: 1.62 <u>Technology 2:</u> 70% 4 plants/m ² 26 pods/plant Yield:5.4q/ha BCR: 2.26 <u>Technology 3:</u> 90% 6 plants/m ² 33 pods/plant Yield: 6.95q/ha BCR: 3.7	Seed treatment and foliar application of Methylobacterium helps in reducing flower drop and increased the yield upto 10% than the conventional method of drought management practices	<ul style="list-style-type: none"> Farmers of this village were mostly interested to adapt the drought mitigation technology in pulse crop. It is used to reduce the flower drop in terminal water stressed condition 	-	-

Watermelon	Watermelon-paddy-pulse	Lack of awareness on the diagnosis of the disease Indiscriminate use of the pesticides Lack of awareness on the control measure of the disease	5	5	Seed treatment with liquid <i>Pseudomonas fluorescens</i> @15ml/kg of seed mixed with required quantity of rice gruel Drenching of nursery portray 2 days before planting with liquid <i>P. fluorescens</i> @500 ml /10 lit of water soil drenching with liquid <i>P.fluorecens</i> @500ml /ha on 15 th day and 30 th DAP	Disease incidence Yield BCR	<u>Disease incidence</u> Demonstration – 0.0 PDI Check – 41.4 PDI <u>Plant population</u> : Demonstration : 2423/ha Check : 2128/ha <u>Yield :</u> Demonstration : 30.4t/ha Check : 11t/ha <u>BCR:</u> Demonstration : 1.59 Check : 3.23	Seed treatment with liquid <i>Pseudomonas fluorescens</i> @15ml/kg of seed mixed with required quantity of rice gruel Drenching of nursery portray 2 days before planting with liquid <i>P. fluorescens</i> @500 ml /10 lit of water soil drenching with liquid <i>P.fluorecens</i> @500ml /ha on 15 th day and 30 th DAP	There was excellent control of the wilt disease. The plant was withstand and tolerated the Thane Cyclone wind speed		
Banana	Irrigated	<ul style="list-style-type: none"> Micronutrient related disorders in vertisol based banana production Poor nutrient management leading to low hand numbers and resultant low yield in Koliyanur areas in Villupuram Tk Difficulties in preparation of field spray involving 4 different compounds 	Foliar nutrition for yield enhancement in Banana	5	Technology I Farmers practice: No application of micronutrients Technology II Foliar application of ZnSO ₄ (0.5%), FeSO ₄ (0.2%), CuSO ₄ (0.2%) and H ₃ BO ₃ (0.1%) at 3,5 and 7 MAP Technology III Banana shakthi (Micro nutrient mixture containing Iron, Boron, Manganese and Copper)@10g/plant 3 months after planting	No. of bunches No. of fruits /bunch Yield/ha BCR	Trial is in progress				

Dairy cows	Irrigated	No supplemental mineral mixture	Area specific mineral mixture for dairy cows	10	TANUVAS mineral mixture 30g/day/animal	Milk yield Onset of oestrus No. of inseminations/one conception	<p><u>Technology I</u></p> <ul style="list-style-type: none"> • Milk yield - 4 litres/day/animal • Onset of first oestrus after calving- 65th day • No.of inseminations for one conception- 4 • BCR-1.77 <p><u>Technology II</u></p> <ul style="list-style-type: none"> • Milk yield- 5.5 litres/day/animal • Onset of first oestrus after calving-52th day • No.of inseminations for one conception- 2 • BCR-1.95 <p><u>Technology III</u> Area specific mineral mixture not available</p>		<ul style="list-style-type: none"> • Increased milk yield • Healthiness of animal • Less number of inseminations for conception • Sureness on conception 	-	-
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Poultry		Unhygienic maintenance of the birds – communicable disease High mortality of population leading to economic loss Difficulties in administering the vaccine by farmers	Control of Ranikhet disease in desi chicken		<p>Technology I No Vaccination</p> <p>Technology II Lasota vaccine intranasal/intraocular on 7th day RDVK vaccine on 8th and 16th week</p> <p>Technology III Oral pellet vaccine on 12th day RDVK vaccine on 8th and 16th week</p>	Mortality % Disease incidenceBCR	<p>Technology I Mortality % - 12% Disease incidence- 20% BCR-1.15</p> <p>Technology II Mortality %- 3% Disease incidence-5% BCR_-1.62</p> <p>Technology III Mortality %- 2% Disease incidence-2% BCR-1.95</p>	Feeding of oral pellet vaccine during 12 th day after hatching along with feed and RDVK vaccine at 8 th and 16 th week	Reduced incidence of ranikhet diseases Low mortality rate in young ones Ease in application and non requirement of skill in vaccination	-	-
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Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	Farmer's practice	-	q/ha	-	
Technology option 2	TNAU	37.76	q/ha	37,760	2.23
Technology option 3	TNAU	56.32	q/ha	56,320	1.54
Technology option 1 (Farmer's practice)	Farmer's practice	425	Kg/ha	8666.7	1.62
Technology option 2	TNAU	540	Kg/ha	16050	2.26
Technology option 3	TNAU	695	Kg/ha	27067	3.70
Technology option 1 (Farmer's practice)	Farmer's practice	-	t/ha	-	-
Technology option 2	TNAU	11.0	t/ha	77,000	1.59
Technology option 3	TNAU	30.4	t/ha	2.12.800	3.23
Technology option 1 (Farmer's practice)	Farmer's practice	-	Kg/ha	-	-
Technology option 2	TNAU	-	Kg/ha	-	-
Technology option 3	TNAU	-	Kg/ha	-	-
Technology option 1 (Farmer's practice)	Farmer's practice	4.0	lit/animal	23729	1.77
Technology option 2	TANUVAS	5.5	lit/animal	32856	1.95
Technology option 3	TANUVAS	-	lit/animal	-	-
Technology option 1 (Farmer's practice)	Farmer's practice	-	-	426	1.15
Technology option 2	TANUVAS	-	-	656	1.62
Technology option 3	TANUVAS	-	-	880	1.95

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

OFT 1

1	Title of technology assessed / Refined	:	Management of false smut in paddy
2	Problem Definition	:	◆ Lack of awareness about the sporadic disease ◆ Lack of awareness about management of the disease
3	Details of technologies selected for assessment / refinement	:	1. Use of disease free seed 2. Seed treatment with carbendazim@2g/kg of seed 3. Spraying of hexaconazole @ 1ml/lit tillering and preflowering stage 4. Chlorothalanyl 2g/lit at maturity stage
4	Source of technology	:	TNAU
5	Production system and thematic area	:	Paddy- Groundnut
6	Performance of the technology with performance indicators	:	Disease incidence Demonstration – 5.5 PDI Check – 43.4 PDI Yield/ha: Demonstration : 56.32 Q Check : 37.76 Q BCR Demonstration : 2.23 Check : 1.54
7	Final recommendation for micro level situation	:	Seed treatment with carbendazim@2g/kg of seed and Spraying of hexaconazole @ 1ml/lit tillering and preflowering stage followed by Chlorothalanyl 2g/lit at maturity stage was found to be effective for the management of False smut disease in rice.
8	Constraints identified and feedback for research	:	-
9	Process of farmers participation and their reaction	:	Farmers were shown to use new molecule for the management of False smut.

OFT 2

1	Title of technology assessed / Refined	:	Foliar application of Methylobacterium on drought tolerance in pulses (Blackgram VBN5)
2	Problem Definition	:	Terminal drought occurrence to the extent of 20 -30% in and around Mailam block
3	Details of technologies selected for assessment / refinement	:	<u>Technology 1:</u> No drought management practice is followed <u>Technology 2:</u> 1% KCl +100 ppm of boric acid spray <u>Technology 3:</u> Seed treatment & Foliar spray of Methylobacterium(1%) during preflowering and post flowering stage
4	Source of technology	:	TNAU.CBE
5	Production system and thematic area	:	Paddy-Groundnut-Blackgram-Sugarcane
6	Performance of the technology with performance indicators	:	<u>Technology 1:</u> 60% 2 plants/m ² 19 pods/plant Yield:4.25q/ha BCR: 1.62 <u>Technology 2:</u> 70% 4 plants/m ² 26 pods/plant Yield:5.4q/ha

		BCR: 2.26 Technology 3: 90% 6 plants/m ² 33 pods/plant Yield: 6.95q/ha BCR: 3.70
7	Final recommendation for micro level situation	: <ul style="list-style-type: none"> • Methylobacterium is suited for the drought mitigation technologies in pulse crop • To mitigate the terminal drought during reproductive stage of pulse and vegetable crops, under rainfed condition, the biofertilizer Methylobacterium is used and it increases the pod setting stage
8	Constraints identified and feedback for research	: -
9	Process of farmers participation and their reaction	: <ul style="list-style-type: none"> • Farmers of this village were mostly interested to adapt the drought mitigation technology in pulse crop. • It is used to reduce the flower drop in terminal water stressed condition • Increased the pod setting and therefore increased the yield upto 10%

OFT 3

1	Title of technology assessed / Refined	: Biological control of wilt disease in watermelon
2	Problem Definition	: <ul style="list-style-type: none"> ◆ Lack of skill to diagnosis the disease ◆ Indiscriminate use of pesticides ◆ Lack of awareness on control measures
3	Details of technologies selected for assessment / refinement	: <ol style="list-style-type: none"> 2. Seed treatment with liquid <i>Pseudomonas fluorescens</i> @15ml/kg of seed mixed with required quantity of rice gruel 3. Drenching of nursery portray 2 days before planting with liquid <i>P. fluorescens</i> @500 ml /10 lit of water soil drenching with liquid <i>P.fluorecens</i> @500ml /ha on 15th day and 30th DAP.
4	Source of technology	: TNAU
5	Production system and thematic area	: Vegetable - Watermelon
6	Performance of the technology with performance indicators	: <p><u>Disease incidence</u> Demonstration – 0.0 PDI Check – 41.4 PDI</p> <p><u>Plant population :</u> Demonstration : 2423/ha Check : 2128/ha</p> <p><u>Yield :</u> Demonstration : 30.4t/ha Check : 11t/ha</p> <p><u>BCR:</u> Demonstration : 1.59 Check : 3.23</p>
7	Final recommendation for micro level situation	: <ol style="list-style-type: none"> 1. Seed treatment with liquid <i>Pseudomonas fluorescens</i> @15ml/kg of seed mixed with required quantity of rice gruel 2. Drenching of nursery portray 2 days before planting with liquid <i>P. fluorescens</i> @500 ml /10 lit of water soil drenching with liquid <i>P.fluorecens</i> @500ml /ha on 15th day and 30th DAP
8	Constraints identified and feedback for research	: -
9	Process of farmers participation and their reaction	: Group meeting and demonstration was conducted. Farmers were showed to use new molecule for the management of False

		smut.
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OFT 4

1	Title of technology assessed / Refined	:	Foliar nutrition for yield enhancement in Banana
2	Problem Definition	:	<ul style="list-style-type: none"> ❖ Micronutrient related disorders in vertisol based banana production ❖ Poor nutrient management leading to low hand numbers and resultant low yield in Koliyanur areas in Villupuram Tk ❖ Difficulties in preparation of field spray involving 4 different compounds
3	Details of technologies selected for assessment / refinement	:	<p><u>Technology I:</u> Farmers practice: No application of micronutrients</p> <p><u>Technology II:</u> Foliar application of ZnSO₄ (0.5%), FeSO₄(0.2%), CuSO₄(0.2%) and H₃BO₃(0.1%) at 3,5 and 7 MAP</p> <p><u>Technology III:</u> Banana shakthi (Micro nutrient mixture containing Iron, Boron, Manganese and Copper)@10g/plant 3 months after planting</p>
4	Source of technology	:	TNAU, CBE, NRCB, Trichy
5	Production system and thematic area	:	Horticulture production system; INM
6	Performance of the technology with performance indicators	:	Trial is in progress
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other Scoring techniques	:	
8	Final recommendation for micro level situation	:	
9	Constraints identified and feedback for research	:	
	Process of farmers participation and their reaction	:	

OFT 5

1	Title of technology assessed / Refined	:	Area Specific Mineral Mixture for Dairy Cows
2	Problem Definition	:	<ul style="list-style-type: none"> ❖ Imbalance nutrition ❖ Non availability of mineral mixture ❖ Delayed onset of first oestrus ❖ Low economic returns
3	Details of technologies selected for assessment / refinement	:	<p><u>Technology I:</u></p> <ul style="list-style-type: none"> • No mineral mixture supplementation <p><u>Technology II:</u></p> <ul style="list-style-type: none"> • Supplementation with TANUVAS mineral mixture @30g/day for 365 days <p><u>Technology III:</u></p> <ul style="list-style-type: none"> • Supplementation with TANUVAS area specific mineral mixture @30g/day for 365 days
4	Source of technology	:	TANUVAS, Chennai
5	Production system and thematic area	:	Dairy
6	Performance of the technology with performance indicators	:	<p><u>Technology I:</u></p> <ul style="list-style-type: none"> • Milk yield -4 litres/day/animal • Onset of first oestrus after calving- 65th day • No.of inseminations for one conception-4 • BCR-1.77 <p><u>Technology II:</u></p> <ul style="list-style-type: none"> • Milk yield-5.5 litres/day/animal • Onset of first oestrus after calving-52th day

			<ul style="list-style-type: none"> No.of inseminations for one conception-2 BCR-1.95 <p><u>Technology III:</u></p> <ul style="list-style-type: none"> Area specific mineral mixture not available
7	Feed back of the farmers	:	<ul style="list-style-type: none"> Increased milk yield Healthiness of animal Less number of inseminations for conception Sureness on conception
8	Final recommendation for micro level situation	:	As per last year report There was no much difference between area specific and general mineral mixture. The availability of area specific mineral mixture is limited and hence TANUVAS general mixture which is available easily may be recommended
9	Constraints identified and feedback for research	:	Non availability at area specific mineral mixture at district level and high mobilization cost
10	Process of farmers participation and their reaction	:	The technology has been delivered to the farmers through demonstrations, trainings and field visit and farmers are satisfied with both the TANUVAS mineral mixtures

1	Title of technology assessed / Refined	:	Control of Ranikhet disease in desi chicken
2	Problem Definition	:	<ul style="list-style-type: none"> ❖ Unhygienic maintenance of the birds – communicable disease ❖ High mortality of population leading to economic loss ❖ Difficulties in administering the vaccine by farmers
3	Details of technologies selected for assessment / refinement	:	<p><u>Technology I</u></p> <ul style="list-style-type: none"> No Vaccination <p><u>Technology II</u></p> <ul style="list-style-type: none"> Lasota vaccine intranasal/intraocular on 7th day RDVK vaccine on 8th and 16th week <p><u>Technology III</u></p> <ul style="list-style-type: none"> Oral pellet vaccine on 12th day RDVK vaccine on 8th and 16th week
4	Source of technology	:	TANUVAS, Chennai
5	Production system and thematic area	:	Poultry-Disease management
6	Performance of the technology with performance indicators	:	Trial is in progress
7	Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring	:	<ul style="list-style-type: none"> Non availability of vaccines in vicinity
8	Final recommendation for micro level situation	:	Too early to report
9	Constraints identified and feedback for research	:	Non availability of oral pellet vaccine and also vaccines at small scale level.
10	Process of farmers participation and their reaction	:	-

4.D1. Results of Technologies Refined

Results of On Farm Trial

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

Contd..

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

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

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

	Fruit	Irrigated	Rabi 2011	Irrigated	Banganapalli, Bangalora and Alphonso	-	Integrated Nutrient Management	Popularization of Growth regulator and nutrients application for fruit retention, yield and quality in mango	5	5	-	5	5	-
	Spices and condiments	Irrigated	Rabi 2011	Irrigated	CO(CR) 4	-	Varietal Evaluation	Introduction of new variety	1	1	1	9	10	-
	Commercial	Burning trashes after harvesting	2011	Sugarcane	-	-	-	Biodegradation of sugarcane trashes with white rot fungus (<i>Pleurotus djmor</i>)	5	5	-	10	10	-
	Medicinal and aromatic													
	Fodder	Irrigated	Kharif 2011	Sorghum	CO 30	-	Improving availability of forages and seeds	Popularization of Sorghum CO 30 for dual purpose	5	5	1	12	13	-
		Irrigated	Kharif 2011	Fodder bank	COCN 4 Guinea grass Hedge lucern Subabul	-	Improving availability of forages	Popularization of fodder bank at village level	1	1	1	12	13	-
	Plantation													
	Fibre													
	Dairy													
	Poultry	2011	Poultry	Desi	-	Poultry Management	-	Popularization of low cost egg incubator to increase hatchability	-	2.0	8.0	-	10	

Blackgram	Integrated crop management in rabi pulses	VBN5	-	Rainfed	8	3	7.57	6.52	7.05	5.52	27.71	12583.5	37499	24999	2.98	15575	29322	14897	1.88
Blackgram	Special technology demonstration for harnessing pulses productivity	VBN 5 & CO 6		Irrigated	13	5.2	12.2	6.6	9.4	5.1	84.3	12270	40276	28006	3.28	15195	22129	6934	1.45
Cereals	Popularisation of CO 50 with IPT	CO (R) 50		Irrigated	10	5	56.2	42.2	49.2	30.2	62.8	26548	43956	17408	1.65	27135	30580	3445	1.12
	Popularisation of mechanization in rice cultivation	ADT 37		Irrigated	6	2.75	Trial is in progress												
	Popularisation of the Paddy TRY 3 for problematic soil	TRY 3		Irrigated			The crop was damaged by Thane Cyclone												
	Popularization of Anna (4) paddy in drought prone areas	Anna(4)		Rainfed	10	5.0	39.50	36.50	38.00	24.50	64.47	18,750	36,100	17,350	1.92	17,250	24,500	7,250	1.42
Millets																			
Vegetables																			
Flowers	Integrated Nutrient Management	Local	-	Irrigated	10	2	Trial is in progress												
Ornamental																			
Fruit	Integrated Nutrient Management	Banganapalli Bangalora and Alphonsa	-	Irrigated	5	5	Trial is in progress												
Spices and condiments	Varietal Evaluation	CO(CR) 4	-	Irrigated	10	1	68	39	52	203	55	16300	64600	48300	3.9	16000	41090	25090	2.5

Commercial																			
Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder	Popularization of Sorghum Co 30 variety for dual purpose	CO30	-	Irrigtaed	10	5	Trial is in Progress												
	Popularization of fodder bank at village level	COCN 4 Guinea grass Hedge lucern Subabul	-	irrigtaed	10	1	2885	2047	2466	2012	22.5	58741	132846	74105	2.26	43012	82371	39359	1.91
Plantation																			
Fibre																			
Others (pl.specify)	Biodegradation of sugarcane trashes with white rot fungus (<i>Pleurotus djmor</i>)	-	-	-	10	2	Trial is in progress												

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

** BCR= GROSS RETURN/GROSS COST

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

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

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

Mussels																		
Ornamental fishes																		
Others (pl.specify)																		

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5.B.4. Other enterprises

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

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

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	2	72	-	72	8	-	8	80	-	80
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	3	65	48	113	18	7	25	83	55	138
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) Farmers scientist interaction meet	2	83	5	88	3	2	5	86	7	93
TOTAL	85	2066	342	2408	517	162	679	2583	504	3087

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	4	198	-	198	16	-	16	214	-	214
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	1	38	-	38	23	-	23	61	-	61
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify) Handling classes	9	289	45	334	57	13	70	346	58	404
TOTAL	37	1407	275	1682	328	88	416	1735	363	2098

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	1	13	8	21	4	-	4	17	8	25
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	1	13	8	21	4	-	4	17	8	25

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	1	53	3	56	2	-	2	55	3	58
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology	1	53	2	55	3	-	3	56	2	58
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)	1	89	20	109	9	16	25	98	36	134
Sensitization training to field level extension functionaries										
TNAU Silpaulin vermibag	2	75	-	75	5	-	5	80	-	80
Total	5	270	25	295	19	16	35	289	41	330

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) High Density Planting in Fruit crops	1	21	5	26	3	1	4	26	4	30
Total	1	21	5	26	3	1	4	26	4	30

7.G. Sponsored training programmes conducted

S.No.	Area of training	No. of Courses	No. of Participants									
			General			SC/ST			Grand Total			
			Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	Crop production and management											
1.a.	Increasing production and productivity of crops	27	489	76	565	27	21	48	516	97	613	
1.b.	Commercial production of vegetables											
2	Production and value addition											
2.a.	Fruit Plants											
2.b.	Ornamental plants											
2.c.	Spices crops											
3.	Soil health and fertility management											
4	Production of Inputs at site											
5	Methods of protective cultivation											
6	Others (pl.specify)											
7	Post harvest technology and value addition											
7.a.	Processing and value addition											
7.b.	Others (pl.specify)											
8	Farm machinery											
8.a.	Farm machinery, tools and implements											
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) TNAU Silpaulin vermibag	2	75	-	75	5	-	5	80	-	80	
	Total	29	564	76	640	32	21	53	596	97	693	

Details of sponsoring agencies involved

1. NABARD, Villupuram
3. Dhanuka Agri Tech Ltd, Tamil Nadu
4. GOI
5. Rajshree Sugars and Chemicals Limited, Semmedu
6. Directorate of Horticulture and Plantation crops, Chennai

7.H. Details of Vocational Training Programmes carried out by KVKs for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production	1	-	15	15	-	-	-	-	15	15
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	Post harvest technology and value addition										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	Livestock and fisheries										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	Income generation activities										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation	3	15	14	29	2	-	2	17	14	31
4.h.	Nursery, grafting etc.	2	-	17	17	-	8	8	-	25	25
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agri. 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	6	15	46	61	2	8	10	17	54	71

PART VIII – EXTENSION ACTIVITIES**Extension Programmes (including extension activities undertaken in FLD programmes)**

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	34	879	123	1002	165	106	271			
Kisan Mela	12	414	86	500	56	44	100			
Kisan Ghosthi										
Exhibition	41	2666	378	3044	677	440	1117			
Film Show	13	417	4	421	211	-	211			
Method Demonstrations	7	24	09	33	-	2	2			
Farmers Seminar	3	54	14	68	12	5	17			
Workshop										
Group meetings	124	1295	879	2174	316	170	486			
Lectures delivered as resource persons	69	1356	364	1720	615	100	715			
Newspaper coverage	31	Mass coverage								
Radio talks	7									
TV talks	3									
Popular articles	19									
Extension Literature	789									
Advisory Services	18	-	-	-	-	-	-			
Scientific visit to farmers field	14	458	9	467	84	38	122			
Farmers visit to KVK	April 2011 to March 2012	1667	74	1741	557	56	613			
Diagnostic visits	38	574	14	588	163	21	184			
Exposure visits	40	631	49	680	417	56	473			
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings										
Celebration of important days (specify)										
Any Other (Specify)										
Total	1262	10435	2003	12438	3273	1038	4311			

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Paddy	Anna 4		1575	11500	32
		CO 50		1000	8250	18
		ADT 49		900	7800	24
Oilseeds	Groundnut	TMV13		1700	100800	8qtls supplied to state seed farm Rest of the seed to 120 farmers
Pulses	Blackgram	VBN 4		330	32670	88
	Blackgram	VBN 5		500	35000	35
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total				6005	196020	

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits	Mango	Alphonso Bangalora Banganapalli Himahudin Neelun Sendura	-	18000	630000	Supplied to DDH , Villupuram
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				18000	630000	

9.C. Production of Bio-Products

	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Products				
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) Goat	Tellicherry	10	77140	10
Goat	Tellicherry	37	-	-
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

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

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

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

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Assessment of water quality of Huluka and Alaltu rivers of Ambo, Ethiopia	P.C.Prabu, Lakew Wondimu and Mitiku Tesso	
Technical reports	IAMWARM Annual reports QRT Report CM Review Report		
News letters	-		
Technical bulletins	-		
Popular articles	Herbicide residue management, 2011 .Agrobios, 10(3) : 48-49	A.P.Sivamurugan, A.Suganthi, K.Natarajan, S.Paul Sebastian & M.Senthil kumar.	
Extension literature			
Others (Pl. specify) Brochure	NICRA-Brochure National Initiative on climate Resilient Agriculture,KVK,Tindivanam	Sathiah,N.,Renuga,M.,Sendhilvel,V.,Prabhu,P.C.,Uma Sankaraeswari,R.,Natarajan,K. and S.Ramesh	
Booklet	Seed Production Technologies for Paddy.	Natarajan, K., Ramesh, C., Prabu, P.C., Uma Sankareswari, R., Renuga,M., Sendhilvel, V and Sathaih, N. 2011	
	Groundnut seed production.	Natarajan, K., Prabu, P.C., Ramesh, S., . Sendilvel, V., Uma Sankareswari, R., Renuka, M., Amutha, A., Vidya, C. and Sathiah, N. 2011.	
	Seed production of Vegetable crops.	Renuga, M., Natarajan, K., Uma Sankareswari, R., Prabu, P.C., Ramesh, C., Sendhilvel,V and Sathaih, N.2011	
	Amla cultivation Technologies	Renuga, M., Natarajan, K., Umasankareswari, R., Prabu, P.C., Ramesh, C., Sendhilvel,V and N.Sathaih.2011	
	Cultivation Technology for Tapioca	Renuga, M., Natarajan, K., Uma Sankareswari, R., Prabu, P.C., Ramesh, C., Sendhilvel,V and N.Sathaih. 2011	
	Cultivation Technology for Paddy	Prabu, P.C., Natarajan, K., Ramesh, c., Uma Sankareswari, R., Renuga, M., Sendhilvel, V and N.Sathaih.2011	
	Integrated pest and disease management in Coconut.	Sendhilvel, V., Sathiah, N., Natarajan, K., Prabu, P.C., Ramesh,C., Uma Sankareswari,R., Amutha, A., Vidhya, C and M .Renuga.2011	
	Cultivation technologies for Groundnut .	Sendhilvel, V., Sathiah, N., Natarajan, K., Prabu, P.C., Ramesh,C., Uma Sankareswari,R., Amutha, A., Vidhya, C and M.Renuga.2011	
	Cultivation Technology for Maize.	Ramesh, C., Prabu, P.C., Sendhilvel, V., Natarajan, K., Uma Sankareswari, R., Renuga,M and N. Sathaih.2011	
	Seedling production technologies for Horticultural Crops.	Ramesh, C., Prabu, P.C., Sendhilvel, V., Natarajan, K., Uma Sankareswari, R., Renuga,M and N.Sathaih. 2011	
	Production technology of gingelly	Uma Sankareswari, R., Prabu, P.C., Natarajan, K., Ramesh, C., Renuga,M, Sendhilvel, V. and N. Sathaih.2011	
	Vembu – plant protection	Sendhilvel, V., Sathiah, N., Natarajan, K., Prabu, P.C., Ramesh,C., Uma Sankareswari,R., and M .Renuga.2011	
	Goat farming	Prabu, P.C., Sendhilvel, V., Sathiah, N., Natarajan, K., Ramesh,C., Uma Sankareswari,R., and Renuga,M.2011	
	Sustainable Sugarcane Initiatives	Uma Sankareswari,R., Sendhilvel, V., Prabu, P.C., Ramesh,C., Natarajan, K., Renuga,M and N.Sathiah.2012	

	New technologies in Plant protection	Sendhilvel, V., Radhakrishnan, V., Natarajan, K., Renuga, M., Prabu, P.C., Uma Sankareswari, R., Ramesh, C., and N. Sathiah. 2012	
	SRI Production technology	Prabu, P.C., Sendhilvel, V., Ramesh, S., Umasankareswari, R., Natarajan, K., Renuga, M., and Sathiah, N.	
	Crop Management practices for Blackgram and Greengram	Uma Sankareswari, Sendhilvel, V., Ramesh, S., Prabu, P.C., Natarajan, K., Renuga, M., and Sathiah, N.	
	Organic Agriculture	Sendhilvel, V., Ramesh, S., Prabu, P.C., Umasankareswari, R., Natarajan, K., Renuga, M. and Sathiah, N.	
	Casuarina Production technology	Prabu, P.C., Sendhilvel, V., Ramesh, S., Umasankareswari, R., Natarajan, K., Renuga, M. and Sathiah, N.	
	Cotton Production technology	Sendhilvel, V., Ramesh, S., Prabu, P.C., Umasankareswari, R., Natarajan, K., Renuga, M. and Sathiah, N.,	
	Production technology for Groundnut, Gingelly, Blackgram and Greengram	Sendhilvel, V., Ramesh, S., Prabu, P.C., Umasankareswari, R., Natarajan, K., Renuga, M. and Sathiah, N.,	
	Total		

10.B. Details of Electronic Media Produced : Nil

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

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

SPECIAL TECHNOLOGY DEMONSTRATION FOR HARNESSING PULSES PRODUCTIVITY

There has not been desirable increase in area and productivity of pulses over the years in Tamil Nadu and India. Farmers of Villupuram district face major constraints such as lack or poor irrigation facilities, acute labour shortage, ignorance of technical knowledge on latest cultivation techniques and indiscriminate dumping of fertilizers and pesticides based on the irrational recommendation of pesticide shop owners. Failing monsoons have further deteriorated the condition badly affecting the kharif crop.

The number of technologies with promise to raise the productivity levels which need to be demonstrated at farmers field with their active participation so as to convince them and build their confidence in new technologies. Old varieties and practices are still operation in many parts of the country. The programme envisages demonstrating production potential of newly developed technologies and varieties of pulses at farmers field through KVKs so as to bring in enhanced application of modern technologies to address the issues related to increased production of pulses in the country. Villupuram KVK selected the Ponnankuppam village of Vikravandi Block for demonstrating the Special pulse programme during rabi season for 12 acres. KVK provided the technical support through trainings, demonstration, exposure visit and exhibition to the FLD farmers of Special pulse programme

Details of training conducted

S.No.	Title of training conducted	Number of participants
1	Production technology of pulses	25 farmers
2.	Exposure visit	100 farmers
3.	Weed management in pulses for improving productivity	100 farmers
4.	Seed treatment for pulses	50 farmers
5.	Foliar application of Pulse wonder and DAP	25 farmers
6.	Mega Agri service on increasing productivity of pulses and oilseeds in Villupuram District	356 farmers

Apart from technical support, KVK provided the critical inputs like improved varieties of VBN 4, biofertilizers, bioinoculants, herbicide, post emergence herbicide, pulse wonder and pesticides to the farmers. P. Gopi, S/o. Perumal of Poonankuppam Village of Vikravandi Block, shares his experience on Special Pulse Programme on blackgram.

Usually I ploughed the field 3-4 times and applied basal application of DAP 50 kg/acre and sowing was taken without seed treatment of biofertilizers and bioinoculants. KVK intervened and explained the advantages of seed treatment of biofertilizers and bio inoculants and then I along with my villagers practiced the seed treatment and taken up the sowing. We learned the maintenance of optimum plant population to increase the yield and we practised the operation of thinning on 16-20 DAS. Generally we didn't practice of spraying of pesticides for pulses at younger stage. KVK staff advised me at younger stage spraying Dimethoate to control the sucking pest. In this way we practised and controlled the sucking pest at early stage and we get the higher yield. KVK has conducted the field demonstration on turga super herbicide application to control the weeds. We were impressed and followed the herbicide application as post emergence to control the weeds and it is easier due to labour shortage in our district. KVK staff explained the advantages of pulse wonder application and we followed the technology to increase the yield and uniform flowering and seed set.

We followed the technologies demonstrated by the KVK and i get the maximum yield of 15 q/ha against the district average yield of 6q/ha. Application of the right nutrition has helped in raising a healthy crop giving a good yield. Keeping the field free from weeds, pests and diseases from sowing to harvest has helped in getting a good yield. So we have to follow the right technology at right time and maximise the yield for sustainable in pulse production.

Success Story II**Title : Popularisation of mechanisation in paddy cultivation****Background:**

I am A. Elamurugan, S/o Arumugam residing at Emeppar village, Thiruvennai Nallur block of Villupuram district. I am one of the Paddy crop cultivating farmers in this district. In my village, the labour shortage is the foremost menace for agriculture and allied farm works. As you know that the paddy cultivation is more labour consumption work. Some time I hesitated to cultivate paddy due to the labour shortage. In these circumstances, Krishi Vigyan Kendra, Villupuram Dt intervened me to provide essential knowledge support to use machinery for paddy cultivation. In the beginning I hesitated to use machine especially operation viz., transplanting because of the uncertainty on the maintenance of seedling numbers and spacing. As per their guidance, I used following machineries to cultivate paddy crop, Its benefits and addressing problem on labour shortage as follows....

Sl. No	Operations in Paddy crop cultivation	Process	KVK intervention	Addressing the local specific problem	Additional benefits
1	Nursery preparation	Method Demonstration	Tray method	Reduced labour for puddling the land	Healthy seedling
2	Seedling pulling		Tray method	10 men labour saved	Investment on cultivation reduced.
3.	Land preparation	Method Demonstration	Power tiller	20 men and 5 women labour saved for one ha	
4	Transplanting	Method Demonstration	Paddy transplanter	25 women labour saved for one ha	Uniform planting and required plant stand
5	Weeding	Method Demonstration	Conoweeder	25 women for one ha	Incorporation of weeds in to the field and aiding tilliering, organic manure incorporated.
6	Harvesting and processing	Method Demonstration	Paddy harvester	15 men and 15 women labour saved	Work completed in shortest possible time

Impact:**Horizontal spread:**

Based on Mr. A. Elamurugan field, the neighboring farmers have shown keen interest to adopt the technologies viz., raising the nursery in tray method, transplanting by machine, using conoweeder for weeding and machinery harvesting.

Economic Gains:

Finally I would like to conclude that if I cultivate paddy in conventional method, every one rupee investment will give return two rupees but if I use machineries as I said, I will get Rs. 3.30. I would like thank Krishi Vigyan Kendra, Tindivanam for their intervention and encouraging me Paddy cultivation is profitable one.

Employment generation:

Since paddy mechanization is a skilled work, I learnt the operational skill and I will be source for custom hiring in the village. This FLD is technically empowering me to operate the machineries such as paddy transplanter, power tiller and conoweeder.

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

1. Farmers participatory seed production
2. Accelerating pulse production by seed producing association under NICRA
3. SSI method of cultivation in sugarcane under NADP
4. SRI method of rice cultivation under TN-IAMWARM Project
5. Introduction of drought tolerant varieties of cereals Paddy Anna 4 under NICRA
6. *In situ* moisture conservation (Polythene film under Watermelon) under NICRA
7. Nursery grafting techniques in mango under NADP-PF

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) Nil

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

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

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

10.G. Field activities

- i. Number of villages adopted: 1
- ii. No. of farm families selected: 300
- iii. No. of survey/PRA conducted: 1

10.H. Activities of Soil and Water Testing Laboratory

- Status of establishment of Lab :
1. Year of establishment : 2010-11
 2. List of equipments purchased with amount :

S. No	EQUIPMENT ETC	Units	AMOUNT Rs.
1	Computer with accessories	1	37599
2	Lab table	4	78000
3	IQBOARD	1	69680
4	Automatic digestion apparatus	1	233170
5	Balance (Top loading)	1	20592

6	Physical balance	1	6760
7	Digital conductivity meter	1	11326
8	Flame photometer & Digital conductivity meter	1	45240
9	All glass single distillation unit	1	36400
10	Khan shaker	1	20800
11	Hot air oven	1	17680
12	Hot plate	1	7956
13	Willey mill	1	32760
14	Waterbath	1	7249
15	Spectrophotometer	1	39104
16	pH Meter	1	5970
17	Sink unit, Exhaust fan and gas setup	1	69846
18	Rack, almirah, angle iron rack	1	63921
19	Soil and plant sample storage	1	99840
20	RO System, GPS and airconditioner	1	55640
21	Stabilizer		28600

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 2011-12 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	257	257	2	6425.00
Water Samples				
Plant samples				
Manure samples				
Others (specify)				
Total	257	257	2	6425.00

10.I. Technology Week celebration during 2011-12 : No

Period of observing Technology Week: From _____ to _____

Total number of farmers visited : _____

Total number of agencies involved : _____

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

Other Details

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

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

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

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
Tamil Nadu	Paddy Anna 4	10	25
	Blackgram VBN5 breeder seeds	5.6	14
	Groundnut TMV 13	3.2	16
	Brinjal	3.6	14
	Bhendi	0.6	5
	Bittergourd	0.7	6
	Watermelon	1	8
	Daincha as Intercrop	2.4	6

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	3.2	16
Groundnut TMV 13		
Pulses Blackgram VBN 5 breeder seeds	5.6	14
Cereals Paddy Anna 4	10	25
Vegetable crops Brinjal PLR1	3.6	14
Bhendi Arka ,Anamika	0.6	5
Bittergourd CO1	0.7	6
Daincha as Intercrop	2.4	6
Tuber crops		
Total		

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
TamilNadu	Livestock Insurance for milch cow & Goat	5	149
	Genetic upgradation of breeds (Telicherry)	6	60
Total		11	209

D. Animal health camps organized

State	Number of camps	No.of animals	No.of farmers
TamilNadu	11	99	209
Total	11	99	209

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Tamil Nadu	Groundnut	3.2	8	-
Total		3.2	8	-

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Tamil Nadu	Polythene film Technology in atermelon	1	8
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)
Value addition	120	20%	12,000	20,000
Mushroom cultivation	340	60%	-	20,000
Biopesticide production	60	30%	-	30,000
Precision Farming	155	62%	50000	1,50,000

11.B. Cases of large scale adoption

(Please furnish detailed information for each case)

i) Large scale demonstration of precision farming over 100ha was implemented from our KVK. For the implementation of the same each farmer have to spent an average amount of Rs.50, 000 per hectare. As the farmers belong to middle class people and as their income was found to be low they were unable to bear such a huge amount to implement the same. In this context, Programme coordinator and the scheme officer in charge of precision farming discussed the issue with the Joint Registrar of Cooperative, Villupuram. He arranged a meeting with the farmers of Olakkur. Programme coordinator and the scheme officer along with

the Registrar Cooperatives Mr.Swain (IAS), Chepauk Chennai at Olakkur. During the meeting Registrar was kind enough to give loan to the farmers upto a tune of Rs.50,000/farmer without any security. This model was followed unanimously through out Tamil Nadu by all cooperative banks. Hence, it was feasible at our end to inplement the precision farming in villupuram district over large scale. This approach had a multipartite linkage between TNAU, Farmer and Bankers. Based on the same , the farmers were empowered economically and they did agriculture as a business.

ii) A SWOC analysis was conducted for the Precision farming farmers by the scientist to draw the success, weaknesses, opportunities and challenges faced under this farming system.

iii) Farmers were motivated to conduct their own workshops inviting the rural youths, farmers and farm women, KVK scientists, bank officials and tertiary doctors in which an awareness was created on latest farming technologies, use of farm machineries and veterinary management.

iv) New crops such as carrot, beetroot and small onions were introduced under Precision farming system (at Chinnasalem). Farmers have also become open to changing the cropping pattern (from groundnut followed by water melon to small onions in larger scale).

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
ORGANISATION'S	
State Department of Agriculture	Joint implementation, participation in meeting
State Department of Horticulture	Joint implementation, mentoring services. Diagnostic services, DMIC Member, NHM programme implementation, Tribal welfare programmes, joint exhibitions, inspections
State Department of Fisheries	Conducting training programmes
Seed certification	Human resource development, certification work in instructional farm, resource person
Lead Banks	conducting training programmes
NABARD	Sponsored programmes, conducting training programmes
Revenue Department	Participation in meeting
State Department of Agriculture Engineering	Participation in meeting
TamilNadu Women Development Corporation (TWDC)	conducting training programmes
Centre for Environment and Agricultural Development (CEAD)	conducting training programmes
Pondicherry Agro Service Industrial Corporation (PASIC)	Input supply and services
Inter Caste Marriage Foundation (ICMF)	Participation in training
IFFCO	Participation in meeting
NGO's	
Hand in Hand, Tindivanam	Organising and participating in training
BOWDA, Villupuram	Organising and participating in training
SCAWD, Villupuram	Organising and participating in training
Kalvi 77endra, Villupuram	Organising and participating in training
SPEED(Society for People Education and Economical Development)	Organising and participating in training

SHG's (Self Help Groups)	
Malligai Magaliar Group, Mailam	Participation in training
Roopa Magaliar Group, Gungamangalam	Participation in training
Jansirani Magaliar Group, Avanampatti	Participation in training
Indhira Gandhi Magaliar Group, Thenkollapakkam	Participation in training
Mailam Magaliar Group, Mailam	Participation in training
Nehru Magaliar Group, Sengurichi	Participation in training
Ganapathy Magaliar Group, Tindivanam	Participation in training
Ezhai Mariamman Magaliar Group, Napalaya	Participation in training
Annai Magaliar Group, Kolliyanoor	Participation in training
Omsakthi Magaliar Group, Valavanoor	Participation in training
Pasunthalir ulavar Mandram, Kattusiviri	Participation in training
Athi parasakthi Magaliar Mandram, Andapattu	Participation in training
Hand in Hand	Participation in training

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.)
Precision farming -Agriculture	April 2011	NADP-TNAU	Rs. 3.67 lakhs
Precision farming -Horticulture	April 2011	NADP-TNAU	Rs. 3.67 lakhs
Sustainable Sugarcane Initiatives	March 2012	NADP-TNAU	Rs.5,40,425 lakhs
Initiative for nutritional security through intensive millets promotion (INSIMP)	February 2012	Government of India under RKVY	Rs.4.00 lakhs
National initiative in climate resilient Agriculture(NICRA)	March 2011	ICAR	Rs. 22.3 lakhs
Production and supply of foundation seeds of pulses(Blackgram &Greengram) by TNAU	December 2011	NADP(RKVY)-TNAU	Rs.1.795 lakhs

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

Coordination activities between KVK and ATMA during 2011-12

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	SREP meeting	1	-	-
02	Research projects				
03	Training programmes	SREP-ATMA	1	-	-
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela				
	Technology Week				

	Exposure visit	Visit by beneficiaries of sister department	6		
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agripreneurs development				
	Total		8		

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1.	Initiative for nutritional security through intensive millets promotion (INSIMP)	Millet promotion	4.00 lakhs	-	
2.	Production and supply of foundation seeds of pulses (Blackgram & Greengram) by TNAU	Accelerating seed production in pulse crop of blackgram & greengram	1.795 lakhs	-	

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2010	-	-	-
May	-	-	-

June	-	-	-
July	10	289	Season specific message is useful to the farmers
August			
September	15	367	Number of message has to be increased as well as daily it should be received by us.
October	12	367	Village specific technologies have to be sent
November	-	-	-
December	-	-	-
January 2011	-	-	-
February	-	-	-
March	-	-	-

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Mist chamber	2006	160 m ²	-	-	-	-	-	
2	Shadene t			Alphonso Bangalora Banganapalli Himahudin Neelun Sendura	Graft s	1800 0	2.0 lakh s	6,30,00 0	Supplied to DDH of Villupuram

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 (Kg).	Cost of inputs	Gross income	
Cereals									
Paddy	15.11.11	8.3.12	0.5 ha	Anna 4	Seed	1575		11500	
	19.11.11	16.3.12	0.3 ha	CO 50	Seed	1000		8250	
	20.11.11	16.3.12	0.2 ha	ADT 49	Seed	900		7800	
Pulses									
Blackgram	3.8.11	24.10.11	0.8 ha	VBN 4	Seed (BS)	330		32670	
	21.7.11	20.9.11	1.5 ha	VBN 5	Seed (TFL)	500		35000	
Oilseeds									
Groundnut	3.7.11	15.10.11	2.0 ha	TMV 13	Seed (BS)	1700		100800	

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

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

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

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

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

14.B. Utilization of KVK funds during the year 2011-12 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances			
2	Traveling allowances			
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)				
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2009 to March 2010	7,57,541	3,69,858	6,42,577	4,84,822
April 2010 to March 2011	4,84,822	5,28,831	8,53,239	1,54,414
April 2011 to March 2012	1,54,414			

15. Details of HRD activities attended by KVK staff during 2011-12

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. V. Sendilvel	SMS (Plant Pathology)	Attended the orientation programme on Automatic Weather Station at CRIDA	Hyderabad	31.5.11
Dr. K. Natarajan	SMS (Seed Science & Technology)	Attended the training programme on Agroforestry, DODL.	TNAU, Coimbatore	18.8.11 to 20.8.11
Dr. K. Natarajan	SMS (Seed Science & Technology)	Attended the Training cum one day workshop on Scouting, documentation and dissemination of grassroots innovations and traditional knowledge	TANUVAS, Chennai	21.9.11
Dr.P.C.Prabu	SMS (Environmental Science)	To attend the conference on 100 years of rice	TNAU, Coimbatore	10.1.12 to 11.1.12
Dr.R.Uma Sankareswari	SMS (Agrl.Microbiology)	To attend the training programme on SREP-ATMA	O/o Joint Director of Agriculture, Villupuram	29.01.12 to 30.01.12
Dr. M. Renuga	SMS (Horticulture)	To attend Global conference on women in Agriculture	NASC, New Delhi	9.3.12 to 17.3.12
Dr. N. Sathiah	Programme Coordinator	Entrepreneurship development modules for KVK Managers	TNAU, Coimbatore	14-3-12 to 16-3-12
Dr.P.C.Prabu	SMS (Environmental Science)	To attend training on PMIS	Chennai	20.3.12
Dr. S. Ramesh	SMS (Agronomy)	To attend training on Sensitisation cum training on capacity building for effective management in KVK system	TNAU, Coimbatore	20.3.12to 22.3.12
Dr. K. Natarajan	SMS (Seed Science & Technology)	To attend the training programme on Risk and Disaster management	TNAU, Coimbatore	27.3.12 to 28.3.12

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

SUMMARY FOR 2011-12

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Banana	Foliar nutrition for yield enhancement in Banana	5
Varietal Evaluation			
Integrated Pest Management			
Integrated Crop Management	Blackgram	Foliar application of Methylobacterium on drought tolerance in pulses (Blackgram VBN5)	5
Integrated Disease Management	Paddy	Management of False smut in paddy	5
	Watermelon	Biological control of wilt in watermelon	5
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			20

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 Raniket disease in desi chicken	5
Evaluation of Breeds			
Feed and Fodder management	Animal husbandry	Area Specific Mineral Mixture for Dairy Cows	10
Nutrition Management			
Production and Management			

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

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

Summary of technologies assessed under refinement of various livestock

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

Fruit	Integrated Nutrient Management	Bangalore and Alphonso	-	Irrigated	5	5	Trial is in progress												
Spices and condiments	Varietal Evaluation	CO(CR) 4	-	Irrigated	10	1	68	39	52	203	55	16300	64600	48300	3.9	16000	41090	25090	2.5
Commercial																			
Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder	Popularization of Sorghum Co 30 variety for dual purpose	CO30	-	Irrigated	10	5	Trial is in Progress												
	Popularization of fodder bank at village level	COCN 4 Guinea grass Hedge lucern Subabul	-	irrigated	10	1	2885	2047	2466	2012	22.5	58741	132846	74105	2.26	43012	82371	39359	1.91
Plantation																			
Fibre																			
Others (pl. specificity)	Biodegradation of sugarcane trashes with white rot fungus (<i>Pleurotus djmor</i>)	-	-	-	10	2	Trial is in progress												

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

** BCR= GROSS RETURN/GROSS COST

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	2	72	-	72	8	-	8	80	-	80
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	3	65	48	113	18	7	25	83	55	138
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) Farmers scientist interaction meet	2	83	5	88	3	2	5	86	7	93
TOTAL	85	2066	342	2408	517	162	679	2583	504	3087

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	4	198	-	198	16	-	16	214	-	214
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	1	38	-	38	23	-	23	61	-	61
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify) Handling classes	9	289	45	334	57	13	70	346	58	404
TOTAL	37	1407	275	1682	328	88	416	1735	363	2098

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	1	13	8	21	4	-	4	17	8	25
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	1	13	8	21	4	-	4	17	8	25

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	1	53	3	56	2	-	2	55	3	58
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology	1	53	2	55	3	-	3	56	2	58
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)	1	89	20	109	9	16	25	98	36	134
Sensitization training to field level extension functionaries										
TNAU Silpaulin vermibag	2	75	-	75	5	-	5	80	-	80
Total	5	270	25	295	19	16	35	289	41	330

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) High Density Planting in Fruit crops	1	21	5	26	3	1	4	26	4	30
Total	1	21	5	26	3	1	4	26	4	30

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	27	489	76	565	27	21	48	516	97	613	
1.b.	Commercial production of vegetables											
2	Production and value addition											
2.a.	Fruit Plants											
2.b.	Ornamental plants											
2.c.	Spices crops											
3.	Soil health and fertility management											
4	Production of Inputs at site											
5	Methods of protective cultivation											
6	Others (pl.specify)											
7	Post harvest technology and value addition											
7.a.	Processing and value addition											
7.b.	Others (pl.specify)											
8	Farm machinery											
8.a.	Farm machinery, tools and implements											
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) TNAU Silpaulin vermibag	2	75	-	75	5	-	5	80	-	80	
	Total	29	564	76	640	32	21	53	596	97	693	

Details of Vocational Training Programmes carried out for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production	1	-	15	15	-	-	-	-	15	15
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	Post harvest technology and value addition										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	Livestock and fisheries										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	Income generation activities										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation	3	15	14	29	2	-	2	17	14	31
4.h.	Nursery, grafting etc.	2	-	17	17	-	8	8	-	25	25
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agri. 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	6	15	46	61	2	8	10	17	54	71

V. Extension 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	34	879	123	1002	165	106	271			
Kisan Mela	12	414	86	500	56	44	100			
Kisan Ghosthi										
Exhibition	41	2666	378	3044	677	440	1117			
Film Show	13	417	4	421	211	-	211			
Method Demonstrations	7	24	09	33	-	2	2			
Farmers Seminar	3	54	14	68	12	5	17			
Workshop										
Group meetings	124	1295	879	2174	316	170	486			
Lectures delivered as resource persons	69	1356	364	1720	615	100	715			
Newspaper coverage	31	Mass coverage								
Radio talks	7									
TV talks	3									
Popular articles	19									
Extension Literature	789									
Advisory Services	18	-	-	-	-	-	-			
Scientific visit to farmers field	14	458	9	467	84	38	122			
Farmers visit to KVK	April 2011 to March 2012	1667	74	1741	557	56	613			
Diagnostic visits	38	574	14	588	163	21	184			
Exposure visits	40	631	49	680	417	56	473			
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings										
Celebration of important days (specify)										
Any Other (Specify)										
Total	1262	10435	2003	12438	3273	1038	4311			

Details of other extension programmes

Particulars	Number
Electronic Media	
Extension Literature	789
News Letter	-
News paper coverage	31
Technical Articles	1
Technical Bulletins	-
Technical Reports	3
Radio Talks	7
TV Talks	3
Animal health camps (Number of animals treated)	-
Others (pl.specify)	-
Total	834

PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Paddy	Anna 4		1575	11500	32
		CO 50		1000	8250	18
		ADT 49		900	7800	24
Oilseeds	Groundnut	TMV13		1700	100800	8qtls supplied to state seed farm Rest of the seed to 120 farmers
Pulses	Blackgram	VBN 4		330	32670	88
		VBN 5		500	35000	35
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total				6005	196020	

Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits	Mango	Alphonso Bangalora Banganapalli Himahudin Neelun Sendura	-	18000	6,30000	Supplied to DDH , Villupuram
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				18000	630000	

Production of Bio-Products

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

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify) Goat	Tellicherry	10	77140	10
Goat	Tellicherry	37	-	-
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 2011-12

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	257	257	2	6425.00
Water				
Plant				
Manure				
Others (pl. specify)				
Total	257	257	2	6425.00

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted

IX. NEWSLETTER

Number of issues of newsletter published

X. RESEARCH PAPER PUBLISHED

Number of research paper published

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

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

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