

PROFORMA FOR ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA (KANCHEEPURAM)

GENERAL INSTRUCTIONS

Please read these instructions very carefully before starting preparation

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

PART I - GENERAL INFORMATION ABOUT THE KVK**1.1. Name and address of KVK with phone, fax and e-mail**

KVK Address	Telephone		E mail	Web Address
Krishi Vigyan Kendra Kattupakkam Kancheepuram District – 603 203	Office 044- 27452371	Fax 044- 27452371	kvkkpm@yahoo.co.in kumaravel69@yahoo.com	kvkkattupakkam.com

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Tamil Nadu Veterinary and Animal Sciences University Madhavaram Milk Colony Chennai – 600 051	044- 25551586 044- 25551579	044- 25551586 044- 25551579	deetanuv@gmail.com	www.tanuv.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. P. Kumaravel	044-26567229	9840113681	kumaravel69@yahoo.com

1.4. Year of sanction: 1985**1.5. Staff Position (as 31st March 2011)**

Sl. No.	Sanct ioned post	Name of the incumbent	Designation	M / F	Discipline	High est Quali fication (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Per man ent / Tem por ary	Cat e gory (SC / ST / OB C / Oth ers)
1	Prog. Coord inator	Dr. P. Kumaravel	Associate Professor & Head	M	Animal Science	M.V.Sc Ph.D.	37400-67000+9000	46400	01.12.06	Per.	BC
2	SMS	Dr. S. Balasundari	Associate Professor	F	Fisheries	M.F.Sc. Ph.D.	15600-39100+8000	34530	16.05.97	Per.	SC
3	SMS	Dr. K. Velmurugan	Assistant Professor	M	Horticulture	M.Sc. (Horti) Ph.D.	15600-39100+7000	29740	08.02.02	Per.	SC
4	SMS	Er. V. Perasiriyar	Assistant Professor	M	Agricultural Engineering	M.E. (Ag. Engg) PGDCA	15600-39100+7000	29110	09.10.2k	Per.	BC
5	SMS	Dr. M. Vimalarani	Assistant Professor	F	Home Science	Ph. D	15600-39100+6000	25780	10.08.05	Per.	BC
6	SMS	Th. P. Murugan	Assistant Professor	M	Agronomy	M.Sc. (Agri.)	15600-39100+6000	22250	31.10.08	Per.	MB C
7	SMS	Dr. K. Devaki	Assistant Professor	F	Animal Husbandry Extension	M.V.Sc	15600-39100+6000		01.11.10	Per.	
8	Prog. Asst. (Lab Tech.) / T-4	Tmt. R. Vaidehi	Programme Assistant	F	Agriculture	B.Sc. (Agri.), M.B.A.	PB2 9300-34800	16000	18.05.06	Per.	BC
9	Prog. Asst.(Comp uter) / T-4	Selvi. S. Vanitha Devi	Computer Programmer	F	Computer Programmer	B.Sc., PGDCA	PB1 5200-20200	9500	06.06.07	Per.	BC

10	Prog. Asst./ Farm Manager	Tmt. S. Mirunalini	Farm Manager	F	Agriculture	B.Sc. (Agri.)	PB2 9300-34800	16000	18.05.06	Per.	BC
11	Assistant	Th. C. John Samuel	Superintendent	M	Superintendent		PB2 9300-34800	18620	13.07.07	Per.	BC
12	Jr. Stenographer	Th. K. Thangaraj	Stenographer	M	Stenographer		PB1 5200-20200	10450	28.05.07	Per.	BC
13	Driver	Th.T.Karuppasamy	Driver	M	Driver		PB1 5200-20200	8400	18.05.06	Per.	SC
14	Driver	Th. K. Senthil Murugan	Driver	M	Driver		PB1 5200-20200		11.10.10	Per.	
15	Supporting staff	Th. E. Sundaram	Attendant	M	Attendant		PB1A 4800-10000	8480	20.07.2k	Per.	SC
16	Supporting staff	Th. M. Gopal	Cook	M	Cook		PB1A 4800-10000	8050	29.01.2k	Per.	SC

1.6. Total land with KVK (in ha) : 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	0.0815
2.	Under Demonstration Units	2.1
3.	Under Crops	11.0
4.	Orchard/Agro-forestry	8.0
5.	Others	

1.7. Infrastructural Development :

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	1989	350	5.0	-	-	-
2.	Farmers Hostel	ICAR	1998	305.15	10.19	-	-	-
3.	Staff Quarters (4 + 1)	ICAR	1998	230	7.36	-	-	-
4.	Demonstration Units							
	1. Orchard	Revolving fund						
	2. Ornamental nursery	Revolving fund						
	3. Vermi compost unit	Revolving fund						
	4. Rabbit unit	Revolving fund						
	5. Ornamental fish production	Revolving fund						
	6. Azolla production unit	Revolving fund						
	7. Medicinal plants	Revolving fund						
	8. Fodder production unit	Revolving fund						
	9. Kitchen garden	Revolving fund						
5	Fencing	-						
6	Rain Water harvesting system	-						
7	Threshing floor	-						
8	Farm godown	-						

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Mahindra MAXX	2004	456000	10593	Road worthy
Scooty Pep Plus	2009	28869	10763	Road worthy
Hero Honda	2009	50743	8003	Road worthy
Tractor	2009	499500	0345	Road worthy

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Seed cum Fertilizer Broadcaster	2003	3000	Good condition
Wooden chaff cutter	2003	700	Good condition
Paddy Drum Seeder	2003	3500	Good condition
Peg type weeder	1995	1000	Good condition

Groundnut stripper	2002	1200	Good condition
Star weeder	2002	3500	Good condition
Secature	1999	125	Good condition
Rose can	1995	110	Good condition
Paddy parboiling unit	1986	1154	Good condition
Seed coating machine	1991	825	Good condition
Hand Operated Groundnut Decorticator	1986	3500	Good condition
Helical blade puddier	1986	950	Good condition
Cono weeder	2003	725	Good condition
Poultry and Fish meal Pelletizer	1991	3736	Good condition
Power weeder	2011	19760	Good condition
Brush cutter	2011	19950	Good condition
Power tiller	2011	150000	Good condition
Power sprayer	2011	4800	Good condition
A.V.Aids			
Display boards	1997	1035	Good condition
Television B and W	1990	3300	Under repair
Pentax camera K – 100	1986	4019	Good condition
Data Projector	2007	92,800	Good condition
Colour T.V	1997	17,975	Good condition
VCR	1997	1600	Good condition
Projection screen	1986	715	Good condition
Digital camera	2004	20000	Good condition
Generator – 2 no.	2009	90819	Good Condition
Office Equipments			
Type writer (Tamil)	1985	5518	Good condition
Type writer (English)	1985	5370	Good condition
Computer and Accessories			
Desktop PC with multimedia kit	2000	59117	Good condition
FAX Modem	2000	9110	Good condition
UPS-1 KVA	2000	1250	Good condition
Lexmark printer	2000	8000	Under repair
HP Ink Jet Printer	2003	3200	Good condition
Scanner	2004	3550	Good condition
Public Address system	2006	10000	Good condition
e-connectivity system provision			
Window AC	2009		Good condition
Chairs (Godrej)	2009		Good condition
Server with Keyboard and mouse (1)	2009		Good condition
Monitor 17" for server (1)	2009		Good condition
Online UPS – 3 KVA	2009		Good condition
Desktops (CPU with Keyboards & Mouse – 5)	2009		Good condition
Monitor (17" TFT LCD – SVGA, TCO – 03) 5	2009		Good condition
UPS – 650 VA Line Interactive UPS for Desktops computers – 5	2009		Good condition
TVS Dotmatrix Printer 245 – 1	2009	8883	Good condition
HP Laserjet P1505n Printer – 1	2009	18200	Good condition
HP 8JG3110 Scanner	2009	6500	Good condition
DAX 24 port switch	2009	24592	Good condition

1.8. Details SAC meeting conducted in 2010-11

Sl.No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	26.02.10	22	-		

Recommendations	Action Taken
1. Th. M.K. Sudhakar, Assistant General Manager, NABARD	
Offer CAT training for 3 days at KVK through NABARD's assistance	NABARD sponsored CAT training programme on Carp Farming was conducted for 3 days for 30 participants from 17.2.2011 to 19.02.2011 at KVK.
Organize farmers club with the financial assistance from NABARD	Established two farmers club on 02.07.2010 namely KVK Vasantham Gramma Vivasaya Sangam at Kattankolathur village & KVK Vetri Farmers Sangam at Konathi village Budget sanctioned Rs.10,000/- to each club.
2. Dr. R.C. Arivazhagan, Assistant Director (Animal Husbandry), Kancheepuram	
For implementing schemes of the department like NADP, KVK can collaborate with the Animal Husbandry Department	KVK collaborates with its line Department in successful conduction of ATMA Schemes in the Kancheepuram District by conduct of Farmers Scientist Linkage meet.
3. Th. V. Ravi, Assistant Director (Horticulture), Kattankulathur	
The products of SHGs can be sold at uzhar sandai	Through KVK, 10 women SHG members were given ID card for the sale of SHG products at uzhar sandai located at Chengalpattu, Guduvanchery, Pallavaram and Nanganallur
Subsidy schemes for medicinal plants cultivation and cultivation of thornless bamboo can be availed by KVK farmers	Awareness on the subsidy schemes for medicinal plants cultivation and cultivation of thornless bamboo was created in 10 training programmes for 390 trainees on 21-07-2010, 21-07-2010, 22-07-2010, 28-07-2010, 04-08-2010, 11-08-2010, 15-09-2010, 15-11-2010 & 01-11-2010.
4. Th. Kanningston, Assistant Director (Agriculture), Tirupurur	
Popularize cultivation of pulses and collaborate with Agriculture department for popularization of red gram	

The following activities were taken to popularize the pulses cultivation as a pure crop.

Name of the Programme	Title of the programme	Critical inputs supplied to the farmers	Name of the Beneficiaries/Nos
FLD	Popularization of ICM Practices in Blackgram	Blackgram Co-6 seeds, Rhizobium, Pseudomonas, Pulse wonder, Pesticides	Th.Ponnan, Vadagal Th.Hariprasad, Thammanur Th.Kamesh, Salavakkam X road Th.Damodhiran, OM Mangalam Th.Javagar, Ammaiappanallur
OFT	Assessment of planting method in Redgram	Redgram CoRg-7 seeds, Polybag, Rhizobium, Pseudomonas, Pulse wonder, Pesticides	Th.Dhanapal, Sathanancherri Th.Muthukrishnan, Kandigai Th.Rajendra babu, Kanithandalam Tmt. Sabitha, Kariyacherri Th.Govindasamy, Kondamangalam
OFT	Assessment of the performance of Pulse wonder in Pulses	Blackgram Co-6 seeds, Rhizobium, Pseudomonas, Pulse wonder, NAA, Pesticides	Th.Ramakrishnan, Pullalur Th.Kamesh, Salavakkam X road Th.Masilamani, Uthiramerur Th.Manohar, OM Mangalam Th.Baskar, Padur
On Campus Training	ICM Practices for Pulses	Date: 07.07.2010 08.07.2010 29.10.2010	Total Participants: 18 progressive farmers
Implement animal husbandry and fisheries activities of KVK through TANWA & other groups		Awareness programme on various livestock farming like Dairy, sheep and Goat, Poultry etc., were created among SHGs of Konathi and Kattankolathur. Training on backyard ornamental fish farming to 20 TANWA- B group members was conducted in Feb.2010 at Melakotaiyur village.	

5. Th. R. Rajagopal, FRO, AIR, Chennai	
Success stories of KVK trained farmers should be recorded and broadcasted through AIR	17 Success stories of KVK trained farmers were recorded on 21.03.2010, 30.04.2010, 29.12.2010 and 04.03.2011 at KVK and broadcasted through AIR.
Organic farming practices must be recorded and broadcasted through AIR	Radio talk of Th.Subbu Mudaliyar, Vallipuram on "Importance of Panchagavia and preparation methods" & Th.Ponnan, Vadagal village on "Organic Agriculture" were recorded and broadcasted through AIR on 30.04.2010.
6. Dr. V.S. Chandrasekaran, Principal Scientist, CIBA, Chennai	
Facilitate marketing of fish and fish products through market tie up	For marketing fish and prawn marketing tie up was arranged to the farmers through traders meet
Publish extension literatures through CD / DVD / short films	Success stories of KVK was published in DVD format
7. Th. S. Rajan Thomas, Assistant Engineer, Agricultural Engineering Department	
Conduct demonstrations on new farm implements in collaboration with Agricultural Engineering department for the benefit of the farmers	Conducted 7 numbers of on campus programme with the total beneficiaries of 82 farmers and farm women on 22.6.10, 27.7.10, 22.10.10, 12.1.11, 8.1.11, 31.1.11 & 21.3.11. In association with Department of Agricultural engineering one. Demonstrated was conducted on usage of reversible plough, Mould board plough, rotavator, chisel plough for our farmers at ATIC campus. Apart from that paddy combined harvester and paddy transplanter was demonstrated at KVK instructional farm on 31.01.11.
8. Tmt. N. Renuga, Assistant Director (Fisheries), Ponneri	
The schemes of the department under NADP, NFDB, IAMWARM, SGSY programmes can be popularised among farmers	Awareness on the schemes of the department was made in every on and off campus programme. Under NADP scheme, KVK trained fish farmers (10) were taken for educational tour to AP, Orissa and WB. Farm ponds were also constructed in 5 KVK trained fish farmers through linkage under IAMWARM scheme.
9. Tmt. B. Kalyani, Child Development Project Officer, ICDS, Potheri	
Establish kitchen garden at ICDS centres and impart training on its importance	Kitchen garden was established in 20 ICDS Centres of Kattankolathur block. Inputs such as seeds and seedlings of vegetables, green leafy vegetables were provided from KVK, Nursery.
10. Tmt. Indrapandian, Maraimalai Nagar	
KVK should assist women SHGs in labelling their products	Label for SHG products has been designed and ordered for printing
11. Tmt. D. Vijaya, Perungalathur	
A lab for ornamental fish disease diagnosis can be established	The samples were tested at Shrimp and fish disease diagnosis lab at TANUVAS, Madhavaram for the KVK trained farmers. Proposal submitted to ICAR under XIth five year plan period for setting up lab at KVK.
12. Th. N.P. Gangadharan, Neelamangalam	
Training on drip and sprinkler irrigation must be given	Conducted 2 numbers of on campus programme on 21.6.10 & 6.9.10 and 5 numbers of off campus programme on 05-04-2010, 24-08-2010, 28-08-2010, 30-09-2010 & 08-02-2011 and 6 guest lecture were given on drip irrigation and water management. 686 farmers were benefited.
Intimate crop management based on weather to the farmers	• KVK Kattupakkam is sending Short Message Service (SMS) through mobile to the progressive farmers regarding new farming technologies and weather based agro advisory services.

Dr. P. Kalaiselvan, Director of Extension Education, TNAU

Popularize organic vegetables cultivation and value added agricultural products	Twelve training programmes on organic vegetables cultivation was given to 346 farmers on 12-05-2010, 07-09-2010, 06-10-2010, 15-11-2010, 30-11-2010, 19-11-2010, 22-12-2010, 14-12-2010, 03-12-2010, 11-01-2011, 01-02-2011 and 10-03-2011.
13. Dr. C.V. Sai Ram, Senior Scientist, ICAR, Bangalore	
Emphasis must be given on IFS	<ul style="list-style-type: none"> • Various training on IFS was given through the Farmers Field School, Sponsored Training Programmes etc. Besides, model units were established in KVK for the benefit of the farmers. • Popular article entitled "Integrated farming system for wetland ecosystem" published in June 2010. • Two training manual released for Integrated farming systems
14. Dr. P. Thangaraju, Vice-Chancellor, TANUVAS, Chennai	
Popularisation of value added products	Seven on campus training programmes for 107 members and 4 off campus training programmes for 152 members were conducted. A workshop on value added milk products sponsored by NABARD and a total of 57 farmers participated & they have imparted hands on training in value added milk products.
Arrange for farmers visit to other KVKs and farms	Exposure visit to Agri-Intex Exhibition 2010, Coimbatore was arranged for 52 farmers during 30.09.2010-02.10.2010

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1.	Paddy – Paddy – Blackgram
2	Paddy – Paddy – Groundnut / sesame
3	Paddy – sugarcane
4	Paddy – Vegetable – Vegetable
5	Paddy – Livestock
6	Green Fodder as a pure crop
7	Sugarcane as pure crop
8	Livestock - poultry
9	Cashew nut as pure crop
10	Pulses - medicinal crops
11	Fodder crop – livestock management

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

S. No	Agro-climatic Zone	Characteristics
1	Coastal Region	Fisheries activities, cashew nut, mango, coconut, paddy, groundnut cultivation are the main activities with livestock management
2	Red soil zone	Cultivation of groundnut, pulses, paddy, vegetables, mango, banana, sugarcane are the main activities with livestock management
3	Black soil zone	Cultivation of pulses, vegetables, cotton, sugarcane, groundnut are the main activities with livestock management

S. No	Agro ecological situation	Characteristics

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Sandy coastal alluvium soil	Fisheries activities, cashew nut, mango, coconut, groundnut cultivation are the main activities with livestock management	Thirukalukundram, Chithamur, Lathur and St. Thomas Mount blocks
2	Red soil zone	Cultivation of groundnut, vegetables, mango, banana, sugarcane, pulses are the main activities with livestock management	Kancheepuram, Kattankolathur, Kundrathur and Thiruporur blocks
3	Black soil zone	Cultivation of pulses, vegetables, cotton, sugarcane, groundnut are the main activities with livestock management	Walajabad, Maduranthagam, Uthiramerur and Acharapakkam blocks

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

S. No	Crop	Area (in ha) (2009-10)	Production (Tonnes)	Productivity (kg /ha)
1	Paddy	96425	38122	4253
2	Cholam	12	23	1850
3	Cumbu	15	62	1925
4	Ragi	210	350	1650
5	Maize	62	135	4850
6	Bengal gram	-	680	310
7	Red gram	9		
8	Green gram	110		
9	Black gram	715		
10	Horse gram	8		
11	Sugarcane	4425	499800	106
12	Cotton	5	22	1.2
13	Groundnut	23245	68520	1925
14	Gingelly	516	273	950
15	Castor	4	4.2	625

2.5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
April 2010	-	34.3	31	52
May 2010	38.5	36.5	33.0	42
June 2010	37	35.1	31.1	43
July 2010	64	33.0	30.2	46
August 2010	36	34.2	28.2	40
September 2010	112	33.0	26.2	52
October 2010	326	22.3	19.5	84
November 2010	324	23.2	20.3	82
December 2010	141	24.4	22.8	70
January 2011	-	29.9	27.2	56
February 2011	-	32.1	28.1	42
March 2011	-	37.4	32.8	39
Average	82.96	31.28	27.53	49.85

* Automatic weather Station at KVK, Kattupakkam

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

Category	Population	Production	Productivity
Cattle	364813	Milk - 107.776	Beef - 20.541 (in million kgs)
<i>Crossbred</i>		51.276	
<i>Indigenous</i>		56.500	
Buffalo	115650	43.993	
Sheep	131183		Chevon – 26.495 (in million kgs)
<i>Crossbred</i>			
<i>Indigenous</i>			

Goats	173304		Mutton – 15.326 (in million kgs)
Pigs	5467		Pork – 0.670 (in million kgs)
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits	2473		
Poultry	353844	Eggs 465.040 lakhs	
Hens	328516		
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			

Source :17th Livestock census – 2004, Department of Animal Husbandry and Veterinary Services, Government of Tamil Nadu

Category	Area	Production	Productivity
Fisheries - Source : Tamilnadu Fisheries Statistics – 2009 – 10 Published by the Directorate of Fisheries, Chennai			
<i>Marine</i>	Estuaries, Back waters and Aquaculture farms 5487 ha Coastal length 87.2 km	9101.39 tonnes	
<i>Inland</i>	13340 ha	8114 tonnes	0.608 tonnes
Prawn			
Scampi			
Shrimp			

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

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1		Kancheepuram	Thirupukuli Vadhiyur Vellagate Avalur Kalur Panapakkam		Paddy, Coconut Jasmine, Brinjal, Chillies mango, cashew, rose bhendi, gourds, capsicum Dairy, Rabbit Freshwater fish farming	Low yield in production due to pest incidence Use of old varieties	Introduction of hybrid varieties
						Low production in vegetable crops Low yield due to pest and diseases	Introduction of hybrid vegetable crop varieties. IPM & IDM in vegetable crops Organic vegetable production Mushroom production
						Shortage of labour Water Scarcity	Farm implements for paddy Sprinkler irrigation
						Disease outbreak (FMD), Lack of green fodder Infertility in dairy animals Inadequacy in availability of parent stock of rabbits	Scientific disease management Green fodder cultivation Establishment of rabbit production unit
						Non availability of quality fish seeds Inadequate knowledge on integrated fish farming	Fish seed production through induced breeding Dissemination of latest technologies

2		Kundrathur	Kovur Kundrathur Somangalam Karaimanagar Padappai Arambakkam Keelpadappai Salamangalam Thiruneermalai		Paddy and Ground nut Vegetables, Fruit and Flower crops Cattle, Sheep and Goat Freshwater fish farming	Water scarcity Labour shortage	Drip irrigation Farm mechanization
						Low productivity in vegetables due to use of local varieties. Production of greens Limited self employment activity	Introduction of hybrid vegetable crops Training on improved packing of practices. Mushroom production
						Lack of Farm workers for field operations Water Scarcity Post harvest technology	Farm implements for paddy & groundnut Drip irrigation Processing of cereals & pulses
						Mastitis in cattle FMD outbreak Poor growth rate in small ruminants	Scientific disease management like Deworming and vaccination
						Lack of awareness on value addition of meat and milk products	Trainings on value added milk, poultry and meat products Quality packing of value added products
3		Sriperumbudur	Edaiyarpakkam Arneri Manimangalam Vallakottai Malaipattu Sunguvarsathira m P.M. Kuppam		Paddy, sugarcane, Crossandra Greenchillies, capsicum, bhendi, brinjal, rose, jasmine mango, Coconut Sheep and goat Pig Freshwater fish farming	Low yield in production due to pest incidence Low yield due to use of old & local varieties	Introduction of hybrid varieties

						Incidence of Pest and diseases in vegetables Low yield due to use of old & local varieties Lack of Self employment activity	Introduction hybrid vegetable crop varieties, INM in vegetable crops Protected cultivation and Precision farming practices. Mushroom production
						Lack of Farm workers for field operations Water Scarcity Post harvest technology	Farm implements for paddy Drip irrigation Processing of fruits & Vegetables
						Poor growth rate in sheep and goat Piglet mortality due to anemia	Regular Deworming & Vaccination Proper care of piglets
4		Walajabad	Villivalam Pulliyambakkam Thammanur Walajabad		Cotton, Paddy, sugarcane, Groundnut, Vegetables, Orchids, mango, Banana Pomegranate & Amla Dairy farming Freshwater fish farming	Low yield in production due to pest incidence Lack of knowledge in management	Introduction of hybrid varieties
						Labour shortage for field operations Water Scarcity storage of food grains	Farm implements Fogger system, Water management Processing of Agricultural produce
						Mastitis, Less productivity Improper timings of Artificial Insemination Disease Outbreak (FMD)	Hygienic maintenance of animals Regular vaccination
						Lack of knowledge in post harvest management and value addition	Popularize value added groundnut products

5		Thirukalukundram	Perumbedu Pandur Thandarai Thazhamedu Ramapalayam Nenmeli Sogandy P.V kalathur Ammanampakkam		Paddy, Sugarcane, Groundnut, Pulses, Watermelon, vegetables, mango, cashew, coconut Banana, Sheep and goat, Poultry Pig Shrimp & crab farming, preservation of fishes	Low yield in production due to pest incidence Low yield due to use of old & local varieties	Introduction of hybrid varieties
						Low productivity in watermelon Nutritional management in fruit orchards	Introduction of hybrid watermelon / ice box water melon, Hybrid vegetable crop varieties, Integrated nutrition management in fruit orchards, High density planting in fruit crops, Mushroom production
						Lack of Farm workers for field operations Water Scarcity Post harvest technology	Farm implements for paddy & groundnut Water management for irrigated crops
						Disease outbreak in livestock Inadequate supply of backyard poultry chicks	Crossbreeding of goats with improved germplasm Popularization of incubators Hygienic maintenance
						White spot virus in shrimp, lack of knowledge on preservation and value addition	Training on scientific shrimp farming, fish preservation & value addition
						Lack of knowledge on value addition	Training on value added vegetables and pulse products

6		Madhuranthagam	Chitravadi Maduranthagam Ottakoil Mamandur Vadapathi Karunkuli Melavalampettai Murukambakkam Kamsalapuram		Paddy, Sugarcane, Vegetable, Mango, watermelon, coconut, Guava, Dairy Sheep and goat Freshwater fish farming	Low yield in production due to pest incidence Low yield due to use of old & local varieties	Introduction of hybrid varieties
						Low production in vegetable crops. Nutrition management fruit cracking and diseases in watermelon Limited Self employment opportunities	Introduction of hybrid cucurbitaceous vegetable crops INM in fruit orchards IDM and micronutrient management in watermelon Introduction medicinal crops through contract farming Establishment of ornamental nurseries Mushroom production
						Lack of Farm workers for field operations Water Scarcity	Farm implements for paddy & groundnut Water management for dry irrigated crops
						Less productivity in livestock farming Disease incidence in sheep & goats	Training on scientific management Prevention and control of diseases
						Non availability of quality fish seeds Inadequate knowledge on integrated fish farming	Fish seed production through induced breeding Dissemination of latest technologies
						Post harvest management	Value addition on watermelon

7		Chithamur	Kannimangalam Pooriyampakkam Puthagaram Chithamur Perambakkam		Cotton, Groundnut, Paddy, Mango and cashew orchards, medicinal plants, vegetables and coconut ornamental nursery Shrimp & crab farming, preservation of fishes	Low yield in production Low yield due to use of old & local varieties	Introduction of hybrid varieties
						Unproductive /low production in orchards Low yield in vegetable IPM and INM in coconut	Dryland horticulture crop production techniques, Introduction of hybrid vegetables IPM and INM practices in coconut gardens. Establishment of ornamental nursery
						Lack of Farm workers for field operations Water Scarcity	Farm implements for paddy & groundnut Water management for dry irrigated crops & Drip irrigation
						White spot virus in shrimp, lack of knowledge on preservation and value addition	Training on scientific shrimp farming, fish preservation & value addition
						Post harvest management	Value addition of fruits

8		Lathur	Lathur Vennangupattu Pounjur Chunamedu		Paddy, pulses, Mango and cashew orchards ornamental nursery vegetables mango, Coconut, Vegetable crops. Shrimp & crab farming, preservation of fishes	Low yield in production Low yield due to use of old & local varieties	Introduction of hybrid varieties
						Low productivity saline tolerant crops Ornamental nurseries Non availability of poultry / turkey chicks	Rejuvenation of old orchards & high density planting Dryland horticulture crop production techniques, Saline tolerant vegetable (or) flower crops Establishment of turkey units
						Shortage of Farm workers for field operations Water Scarcity	Farm implements for paddy & groundnut Water management for dry irrigated crops & Sprinkler irrigation
9		Tiruporur	Vembedu Tiruporur Kayar Muttukadu Kovalam Chemmancherry Mambakkam Thaiyur		Coconut, vegetables, fruit orchards Coconut, water melon, Mango, Cashew, Coconut Shrimp & crab farming, preservation of fishes	Eriophyid mite in coconut Unproductive /low productivity in orchards	IPM in coconut , Rejuvenation of old mango and cashew orchards. Introduction of hybrid vegetables
						Lack of Farm workers for field operations Water Scarcity	Farm implements for paddy & groundnut Plant protection Equipments Water management for Dry irrigated crops & Drip irrigation

10		Uthiramerur	Chithanakavur Irumbedu Nelvoy Poragal Karanimandapam Kaliyampoondi		Orchids, vegetables and medicinal plants	Low productivity in vegetable crops Protected cultivation of orchids and vegetables Self employment activity	Organic farming practices specially for vegetable crops Introduction of hybrid vegetables crop varieties Precision farming principles Mushroom production
					Orchid, Paddy, Vegetable, Medicinal plant.	Lack of Farm workers for field operations Water Scarcity	Farm implements for paddy & groundnut Water management for Dry irrigated crops
					Sheep and goat	Disease outbreak	Hygienic maintenance Prevention and control of diseases
					Paddy and groundnut	Difficulty in harvesting using local sickle	Training on drudgery reduction using local sickle
					Freshwater fish farming	Non availability of quality fish seeds	Fish seed production through induced breeding
11		Acharapakkam	Nedungal Melmaruvathur Sothupakkam Karunkuli Karasangal		Vegetable, fruit orchards, watermelon, Medicinal crops	Low productivity in vegetable. Nutrition management Fruit cracking and disease incidence in watermelon	Introduction of hybrid vegetable crop varieties IDM and micronutrient management in watermelon Organic farming technologies Mushroom production
					Paddy, groundnut, Guava, vegetable, watermelon.	Lack of Farm workers for field operations Water Scarcity Storage of food grains	Farm implements for paddy & groundnut Water management for irrigated crops
					Poultry	Lack of supply of poultry chicks	Popularization of incubators

12		Kattankulathur	Potheri Peramanur Thimmavaram Kayarambedu SP Koil Anjur Kattupakkam Kavanur Konathi		Cotton, Groundnut, Paddy, Bhendi, Brinjal, Rose, Jasmine, Mango, Banana	Lack of Farm workers for field operations Water Scarcity Post harvest technology	Farm implements for paddy & groundnut Water management for Dry irrigated crops
					Vegetables, flower crops fruit crops, ornamental nurseries, medicinal plants	Low production in vegetable and flowers crops	Introduction of hybrid vegetables crop varieties kitchen gardening, Integrated nutrient management in mango and cashew orchards, Introduction of medicinal crops Establishment of ornamental nurseries organic vegetable crop production Mushroom production
					Rabbit	Lack of awareness on scientific management	Training and awareness on improved scientific management of rabbits
					Kitchen garden	Pests	Use of organic manure and pest control
					Freshwater fish farming	Non availability of quality fish seeds	Fish seed production through induced breeding
13		St. Thomas Mount	Nemillicherry Madambakkam Nanmangalam Selaiyur Noothancherry		Vegetables, flower crops rose, jasmine, crossandra, Self employment activity	Low productivity of vegetable Nutritional management in flower crops	Introduction of hybrid vegetables crop varieties Organic farming techniques Integrated nutrient management in flower crops Mushroom production Kitchen gardening
					Coconut, Paddy	Lack of Farm workers for field operations Water Scarcity	Farm implements for paddy & groundnut Drip irrigation
					Groundnut	Lack of knowledge on value addition	Training on value added products

2.9 Priority thrust areas

Sl.No.	Thrust area
1	Popularization of RAJARAJAN 1000 (SRI) technology for paddy
2	High yielding varieties & ICM practices for Groundnut and pulses
3	Improved practice for Green fodder cultivation
4	Organic production method for crop production
5	Popularization of fodder bank at farmers field
6	ICM practices for sugarcane
7	Hybrid maize production technologies
8	Integrated nutrient management for agricultural crops
9	Mushroom production as an income generating activity
10	Organic vegetable production
11	Introduction of medicinal and aromatic plants cultivation through contract farming
12	Establishment of ornamental nursery and its management
13	Value added milk, meat and fish products
14	Popularization of value added meat products
15	Post Harvest Technology of fruits and vegetables / cereals & pulses
16	Integrated farming systems
17	Infertility Management
18	Backyard poultry farming with improved varieties in different species
19	Turkey and Japanese quail rearing
20	Animal disease prevention and control
21	Encouraging pork production
22	Drudgery reduction using farm implements
23	Water management and soil conservation techniques
24	Ornamental fish culture
25	Composite fish culture in community and temple tanks

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
7	7	85	85	14	14	129	129

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
150	167	4000	5079	4000	5177	7500	12545

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
	Fodder sorghum – 15 kgs	10200	Brinjal – 13170
	Desmanthus – 40 kgs		Chillies – 3530
	Ragi – 20 kgs		Tomato - 980
	Cumbu Napier Grass - 59800		
	Paddy – 1600 kgs		
	Blackgram – 41 kgs		
	Cowpea – 42 kgs		
	Sesame – 17 kgs		

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
Japanese Quail – Chicks – 750 kgs	1078 kgs.	Azolla – 75 kgs	112 kgs
Japanese Quail – eggs - 1000 nos.	1756 nos.	Vermicompost – 1000 kgs	1250 kgs
Poultry – eggs – 1000 nos.	1866 nos.	Panchakavya – 50 litre	100 litre
Turkey eggs – 75 nos	117 nos.		

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
													No.	Kg
1	Paddy	Paddy	Lower yield due to non adoption of hybrid rice variety	-	Popularization of CoRH3 hybrid paddy through SRI method	6	-	1	7	40 kg	-	-	1	300
2	Paddy	Paddy	Heavy incidence of pest & diseases in paddy	-	Integrated pest & disease management in paddy	4	-	3	10	75 kg	-	-	-	-
3	Fodder production	Mixed fodders	Shortage of green fodder	-	Popularization of fodder bank at village level	7	-	2	5	30 kg	90000 slips 250 seedlings	-	1	75
4	Oilseeds production	Groundnut	Non availability of high yielding varieties, Non adoption of ICM practices	-	Introduction of high yielding variety and ICM practices in groundnut in rabi season	5	-	1	5	200 kg	-	-	3	30
5	Oilseeds production	Sesame	Non availability of high yielding varieties, Non adoption of ICM practices	-	Introduction & popularization of latest variety TMV7 sesame & ICM Practices	3	-	2	5	20 kg	-	-	3	20 kgs

6	Pulses production	Blackgram	Non availability of high yielding varieties, Non adoption of ICM practices	-	Popularization of ICM practices in blackgram	8	-	3	11	100 kg	-	-	3	45 kgs
7	Pulses production	Blackgram	Non adoption of foliar nutrition, lower yield	Assessment of pulse wonder in pulses	-	2	-	3	6	50 kg	-	-	3	20 kgs
8	Pulses production	Redgram	Lower yield, non adoption of proper plant spacing	Assessment of planting method in redgram	-	6	1	2	5	30 kg	-	-	3	25 kgs
9.	IPM in vegetable crops	Chillies	Yield reduction due to incidence of pest & disease complex	Management of pest & disease complex in chillies	-	5	-	1	12	-	-	-	Pheromone traps 24	-
10	Hybrid vegetable production	Brinjal	Lower yield due to non adoption of high yielding varieties	-	Popularization of brinjal variety Co(B)H2	5	-	1	9	2kgs	Vegetable seedlings	-	-	-
11	Vegetable production	Snakegourd	Low yield due to non adoption of high yielding varieties	-	Popularization of snakegourd variety PLR2	5	-	1	22	Seeds 2 kgs	-	-	-	-

12	Millets	Minor millets	Lack of awareness on its nutrition value, processing of millets & value addition	Assessment of KVK nutrimix on Anaemic preschool children		1	-	-	-	-	-	-	-	-
13	Fruits	Fruits	Processing of fruits in very minimum			3	2	-	-	-	-	-	-	-
14	Pulses	Pulses	Lack of awareness on value addition			2	1	-	-	-	-	-	-	-
15	Dairy	Dairy	Lack of awareness on value addition			1	1	-	-	-	-	-	-	-
16	Vegetable	Vegetables	Lack of awareness on value addition			1	1	-	-	-	-	-	-	-
17	Nutrition garden	Vegetables , Greens	Under utilization of kitchen waste water			2	-	-	-	Seeds & seedlings of vegetables, greens & fruits	Seeds & seedlings of vegetables, greens & fruits	-	-	-
18	Fish farming in village ponds	Carp	Non availability of quality fish fingerlings	-	Carp farming in community ponds	4	8	7	-	12000 nos.	-	-	-	-

19	Animal production	Dairy	Infertility & reproductive disorders in dairy cattle	Synchronization of estrus in dairy cows		10	-	-	10	CIDR implants	-	-	-	-
20	Animal production	Dairy	Low production in dairy cows	Area specific mineral mixture for dairy cows		5	-	-	5	-	Mineral mixture 100 kg	-	-	-
21	Animal production	Sheep & goat	-	-	Integrated disease management in sheep & goat	15	-	-	15	-	-	-	-	-
22	Animal production	Goat	-	-	Artificial insemination of local ND goats with boer semen	10	-	-	10	-	-	-	-	-
23	Animal production	Poultry	Mortality in desi chicken	Control of Ranikhet disease in desi chicken		5	-	-	5	-	Oral pellet vaccine	-	-	-
24	Animal production	Poultry	-	-	Introduction & popularization of Nandanam turkey	10	-	-	10	-	-	100	-	-
25	Animal production	Poultry	-	-	Popularization of Small scale incubators	5	-	-	5	-	-	One	-	-

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	Foliar application of pulse wonder for blackgram	TNAU	Blackgram	5	10	8	-
2	Transplanting method of redgram	TNAU	Redgram	5	-	6	-
3	Hybrid maize production technology	TNAU	Maize	-	-	3	-
4	Rajarajan 1000 – paddy production technology	TNAU	Paddy	-	6	12	-
5	Popularization of CoRH3 hybrid paddy	TNAU	Hybrid paddy	-	6	12	-
6	Integrated pest and disease management in paddy	TNAU	Paddy	-	6	6	-
7	Popularization of fodder bank at village level	TNAU	Green fodders	-	5	5	-
8	Integrated farming system for different ecosystem	TNAU	All enterprises	-	-	5	-
9	Popularization of Groundnut rich	TNAU	Groundnut	-	5	1	-
10	Integrated nutrient management for agricultural crops	TNAU	Paddy, groundnut	-	5	6	-
11	Integrated weed management	TNAU	All crops	-	-	3	-
12	Root rot management in groundnut & pulses	TNAU	Groundnut, pulses	-	-	7	-
13	Soil and water sampling procedure	TNAU	All crops	-	-	5	-
14	Seed production techniques for paddy & blackgram	TNAU	Paddy, blackgram	-	-	5	-
15	Weather based agro advisory service	TNAU	All crops	-	-	2	-
16	Organic agriculture production	TNAU	All crops	-	-	12	-
17	Rice mat nursery preparation	TNAU	Paddy	-	-	3	-
18	Sugarcane production technology	TNAU	Sugarcane	-	-	3	-
19	Precision farming technologies	TNAU	Vegetable crops	-	-	3	NADP scheme
20	Installation of drip system for vegetable crops	TNAU	Vegetable crops	-	-	4	NADP scheme
21	Water soluble fertilizer for vegetable production	TNAU	Vegetable crops	-	-	4	NADP scheme
22	Hybrid varieties in vegetable production	TNAU	Vegetable crops	-	1	4	NADP scheme

23	Polythene mulching for watermelon	TNAU	Vegetable crops	-	-	4	NADP scheme
24	Growth regulator for flower induction	TNAU	Vegetable crops	-	-	4	NADP scheme
25	IPM technology for vegetable crops	TNAU	Vegetable crops	1	-	4	NADP scheme
26	Post harvest technology for vegetable crops	TNAU	Vegetable crops	-	-	1	NADP scheme
27	Organic farming in vegetable crops	TNAU	Vegetable crops	-	-	3	
28	Mushroom production	TNAU	Mushroom	-	-	10	
29	Fruit crop production and orchard management	TNAU	Fruit crops	-	-	1	
30	Medicinal & aromatic crop production	TNAU	Medicinal crops	-	-	3	
31	Fodder production in fruit orchards	TNAU	Fruit crops	-	-	1	
32	Bamboo cultivation	TNAU	Bamboo	-	-	8	
33	Popularization of dairy products	TANUVAS	Dairy	-	-	2	
34	Popularization of bakery products	TNAU	Bakery products	-	-	1	
35	Value added soya products	CIAE	Soya processing	-	-	-	NABARD (STP)
36	Kitchen gardening & nutrition gardening	TNAU	Nutrition gardening	-	-	2	-
37	Value added vegetable products	TNAU	Vegetables	-	-	2	
38	Processing of fruits	TNAU	Fruits				
39	Popularization of cereal and pulses products	TNAU	Cereals & pulses				
40	Wealth from waste & rural crafts	Avinashilingam university	Paper bags / stand, Toys, pot designing	-	-	-	Voc. training to school children
41	Processing of millets and value addition	TNAU	Millets	1	-	1	
42	Value added groundnut products	TNAU	Groundnut	-	-	1	
43	Women empowerment through SHG	NRCWA	SHG women	-	-	1	
44	Composite fish culture	CIFRI	Carps	-	7	12	-
45	Control of Ranikhet disease in desi chicken	TANUVAS	Poultry farming	1	-	-	-
46	Area specific mineral mixture for dairy cows	TANUVAS	Dairy farming	1	-	-	-
47	Synchronization of estrus in dairy cows	TANUVAS	Dairy farming	1	-	-	-
48	Introduction & popularization of Nandanam turkey	TANUVAS	Poultry farming	-	1	-	-

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	14	-	2	-	164	258	14	3	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	19	11	3	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	174	114	35	47	-	-	-	-
-	-	-	-	-	-	-	-	11	1	3	1	-	-	-	-
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-	-	-	-	-	-	-	-	225	69	55	25	-	-	-	-
-	-	-	-	-	-	-	-	17	43	-	-	-	-	-	-
-	-	-	-	-	-	-	-	18	33	4	1	-	-	-	-
-	-	-	-	-	-	-	-	5	10	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	90	7	2	-
-	-	-	-	-	-	-	-	-	-	-	-	6	11	-	-
12	18	-	-	-	-	-	-	1	7	-	-	-	-	-	-
-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-
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2	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-
1	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-
3	2	3	2	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	6	1	2	1	-	-	-	-	-	-	-	-
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-	-	-	-	4	1	6	4	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	50	-	1	-	-	-	-	-
-	-	-	-	-	-	-	-	182	88	37	42	-	-	-	-
-	-	-	-	-	-	-	-	49	3	13	-	-	-	-	-
-	-	-	-	-	-	-	-	72	4	4	-	-	-	-	-
-	-	-	-	-	-	-	-	43	2	11	1	-	-	-	-
-	-	-	-	-	-	-	-	13	9	5	-	-	-	-	-
-	-	-	-	-	-	-	-	146	407	14	8	-	-	-	-

Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total										

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management	2	1				3
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	2	1				3

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management	Blackgram	Assessment of the performance of pulse wonder in pulses	5	5	2.0
Varietal Evaluation					
Integrated Pest Management	Chillies	Management of pest and disease complex in chillies	10	10	2.0
Integrated Crop Management	Redgram	Assessment of planting method in redgram	5	5	2.0
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			20	20	6.0

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

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

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

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

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

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

7 C1. Results of Technologies Assessed
Results of On Farm Trial – 1. Agronomy (2010-11)

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Blackgram	Irrigated	Lower yield due to non application of fertilizers, non adoption of foliar spray during flowering stage, lack of knowledge on management practices	Assessment of the performance of Pulse wonder in pulses	5	Basal dose of fertilizer + foliar spray of pulse wonder (6.25 kg/ha) at flowering stage + NAA @ 40 ppm on pre flowering and 15 days after 1 st spray.	No. of pods/ plant	31.56
						Yield kg/ha	865.56
						BCR	2.89 : 1

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
Application of pulse wonder 2.25 kg/acre with 200 liters of water is effective for increasing the yield (5 – 10%) compared to 2% DAP spray, decrease the flower shedding and increase the drought tolerance of blackgram plants	The farmers were satisfied with foliar application of pulse wonder for blackgram to increase the yield and induced drought tolerance in blackgram	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Conventional method of blackgram cultivation and without foliar nutrient application	Farmer's practice	686.10	Kg/ha	20874.50	2.42 : 1
Technology option 2 Basal dose of fertilizer + foliar spray of 2% DAP at flowering stage and 15 days after first spray	TNAU, Coimbatore	822.64	Kg/ha	27018.80	2.69 : 1
Technology option 3 Basal dose of fertilizer + foliar spray of pulse wonder (6.25 kg/ha) at flowering stage + NAA @ 40 ppm on pre flowering and 15 days after 1 st spray.	TNAU, Coimbatore	865.56	Kg/ha	28950.20	2.89 : 1

Results of On Farm Trial – 2. Agronomy (2010-11)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Redgram	Irrigated	Lower yield due to improper planting method, maintenance of poor plant population, non adoption of foliar spray during flowering stage, lack of knowledge on management practices	Assessment of planting method in Redgram	5	Seedling raised in polybags and transplanted on 25 – 28 days after sowing, seed treatment with (Rhizobium, Trichoderma, Phosphobacteria), NAA, pulse wonder and Thiodicarb spray	No. of plant / m ²	1.85
						No. of pods / plant	244
						Yield kg/ha	790.94
						BCR	2.16 : 1

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
Direct sowing method of redgram with seed treatment of Rhizobium, Trichoderma, Phosphobacteria, NAA & 2% DAP foliar spray and Thiodicarb spray to increase the higher yield (831.58 kg/ha) in redgram compared to transplanting method.	The farmers were satisfied with direct sowing of redgram cultivation gives higher yield	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Conventional method of direct sowing	Farmer's practice	725.68	Kg/ha	21104.24	1.90 : 1
Technology option 2 Seeds dibbling by hand recommended by TNAU. Direct sowing with seed treatment (Rhizobium, Trichoderma, Phosphobacteria), NAA, pulse wonder and Thiodicarb spray.	TNAU, Coimbatore	831.58	Kg/ha	24757.94	2.32 : 1
Technology option 3 Seedling raised in polybags and transplanted on 25 – 28 days after sowing, seed treatment with (Rhizobium, Trichoderma, Phosphobacteria), NAA, pulse wonder and Thiodicarb spray	TNAU, Coimbatore	790.94	Kg/ha	22010.42	2.16 : 1

Results of On Farm Trial – 3 – Horticulture (2010-11)

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Chillies	Irrigated	Yield reduction due to incidence of pest & disease complex	Management of chillies pest & disease complex	10	IPM techniques in chillies for pest & disease complex management	Disease incidence	9.5
						Pod borer incidence	8.92
						Yield	13.04
						BCR	2.61

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
1. Azadirachtin @ 2ml/lit on 25 DAT 2. Difenconazole 0.5 ml/lit 35 th & 60 th DAT (need based) 3. Imidachloprid @ 2ml/lit (need based) 4. P.flouescens @ 10g/lit on 40 DAT 5. Flubendiamide 25 g ai/ha 6. Set up pheromone trap 12 no/ha	Technology parameters are being done by scientist only & farmers were actively participated in collecting data. The farmers were able to record the yield data and handed over to the scientists.	Nil	Nil

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Chemical control with carbendazim & synthetic pyrethroids	Farmer's practice	8.55	t/ha	24850	1.71
Technology option 2 1. Spraying of mancozeb @ 2g/lit at 15 days interval 2. Set up pheromone trap @ 12 no/ha 3. Spraying of chlorpyriphos @ 2ml/lit	TNAU, Coimbatore	10.98	t/ha	41860	2.20
Technology option 3 1. Azadirachtin @ 2ml/lit on 25 DAT 2. Diefenaconazole 0.5 ml/lit 35 th & 60 th DAT (need based) 3. Imidachloprid @ 2ml/lit (need based) 4. P.flouescens @ 10g/lit on 40 DAT 5. Flubendiamide 25 g ai/ha 6. Set up pheromone trap 12 no/ha	TNAU, Coimbatore	13.04	t/ha	56280	2.61

Results of On Farm Trial – 4 Animal Science (2010-11)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Poultry	Poultry farmers	Mortality in Desi birds	Control of Ranikhet disease in desi chicken	50 units	Birds with oral pellet vaccine on 7 th and 14 th day & RDVK at 8 th week	Disease incidence	Ranikhet prevalent at 2 nd week in chicks
						Mortality %	5%
						BCR	4.87

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
The farmer accepts the effectiveness of the vaccine and was happy over the reduced disease incidence	Not easily available in the market	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) No vaccination	Farmer's practice	80 – 120 eggs	Nos	6110	2.88 : 1
Technology option 2 Lasota vaccine on 7 th & 14 th day & RDVK at 8 th week	TANUVAS	80 – 120 eggs	Nos	12230	4.76 : 1
Technology option 3 Oral pellet vaccine on 7 th & 14 th day & RDVK at 8 th week	TANUVAS	80 – 120 eggs	Nos	12590	4.87 : 1

Results of On Farm Trial – 5 Animal Science (2010-11)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Dairy	Dairy farmers	Low milk production in dairy cows	Area specific mineral mixture for dairy cows	10 units	Supplementation of TANUVAS smart mineral mixture (Area specific mineral mixture)	Milk yield	300 – 500 ml
						Onset of first oestrus after calving	3 – 4 months
						No of insemination for one conception	1 – 2

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
The farmers feels that the animals breeding problems are reduced along with increasing milk yield	Increase in milk yield. Animal is healthy with shining hair coat. Animal comes to heat regularly	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) No mineral mixture supplementation	Farmer's practice	6	Litres / animal	32,940	
Technology option 2 TANUVAS mineral mixture supplementation	TANUVAS	6.3	Litres / animal	34,587	1.05 : 1
Technology option 3 Area specific mineral mixture supplementation	TANUVAS	6.5	Litres / animal	35,685	1.08 : 1

Results of On Farm Trial –6 Animal Science (2010-11)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Dairy	Dairy farmers	Performing A.I. for animals when they come for estrus at different periods	Synchronization of estrus in dairy cows	5	Synchronization of estrus in dairy cows with CIDR and PGF ₂ α injection. Synchronization of estrus with GNRH and PGF ₂ α injection	Stage of oestrum Conception rate	Dioestrum 60 – 80 % (70%)

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
It is effective only upto 70%. Technical staff is essential for implementation	Very effective and technical guidance is essential in implementation	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) AI normal	Farmer's practice	Out of 5 animals 2 animals conceived	40% conception rate	18,300	1.5 : 1
Technology option 2 CIDR and PGF ₂ α injection	TANUVAS	Out of 5 animals 4 animals conceived	80% conception rate	25,620	2.1 : 1
Technology option 3 GNRH and PGF ₂ α injection	TANUVAS	Out of 5 animals 3 animals conceived	60% conception rate	21,960	1.8 : 1

Results of On Farm Trial –7 Home Science (2010-11)

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Health status	-	Iron deficiency among Pre-school children	Assessment of KVK nutrimix on health status of Anaemic preschool children	Supplementation period 5 months	Supplementation of KVK nutrimix on Anaemic preschool children of Konathi village.	Clinical examination Anthropometric measurements Estimation of blood Haemoglobin	Face – eye, nose, lips, teeth, ear Skin, stomach, hands, legs, nail, hair Height, weight, head circumference, chest circumference, mid upper arm circumference Degree of Anaemic – normal – >11 g/dl Mild – 9 – 11 g/dl Moderate – 7 – 9 g/dl Severe - < 7

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
Blood Haemoglobin level were <12 mg/dl initially for all the children. After supplementation the hb level increased by 1.2 to 1.4 g/dl in group II children and 1.6 to 2.0 g/dl in group III children. Thus group III children shifted to normal and mild category from moderate and severe anaemic.	Mothers of the children are willing to feed their children with KVK Nutrimix even after completion of the study	-	-

Contd..

Technology Assessed	Source of Technology	Production / Performance	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Regular Home Diet – 10 children	-	-	-	-	-
Technology option 2 Sesame incorporated nutrimix - 10 children	TNAU, Madurai campus	7 out of 10 children were free of Anaemia	-	-	-
Technology option 3 KVK Nutrimix – 10 children	KVK, Kattupakkam	10 out of 10 children were free of Anaemia	-	-	Improvement in health status-weight and haemoglobin

Results of On Farm Trial –8 Fisheries (2010-11)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Ornamental fish farming	-	Disease outbreaks in ornamental fish farming	Assessment of formulated feed fortified with herbal mix for colour and immune enhancement	2	Formulated feed with herbal mix	Biogrowth parameters (Growth, survival & color)	Average body weight - 28 g Survival - 80% Growth increment – 10.72 %

Contd..

Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
9	10	11	12
The formulated feed with herbal mix improved the colour, growth rate and disease resistance in ornamental fish – Gold and koi carp	Farmers get more price for their fishes due to improved colour and less disease occurrence.	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Farm made feed					
Technology option 2 Formulated feed with herbal mix	TANUVAS	The parameters assessed are qualitative like improvement in colour and immunity			
Technology option 3					

On farm trial – 1 Agronomy

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

- 1 Title of Technology Assessed : **Assessment of the performance of pulse wonder in pulses**
- 2 Problem Definition : Lower yield due to non application of fertilizers, non adoption of foliar spray during flowering stage, lack of knowledge on management practices

- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	Conventional method of blackgram cultivation and without foliar nutrient application
Technology option 2	TNAU, Coimbatore	Basal dose of fertilizer + foliar spray of 2% DAP at flowering stage and 15 days after first spray
Technology option 3	TNAU, Coimbatore	Basal dose of fertilizer + foliar spray of pulse wonder (6.25 kg/ha) at flowering stage + NAA @ 40 ppm on pre flowering and 15 days after 1 st spray.

- 4 Source of technology : TNAU, Coimbatore

- 5 Production system and thematic area : Pulses production

- 6 Performance of the Technology with performance indicators

Sl. No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined								
			Technology Option 1			Technology Option 2			Technology Option 3		
			No. of pods / plant	Yield Kg /ha	BCR	No. of pods / plant	Yield Kg /ha	BCR	No. of pods / plant	Yield Kg /ha	BCR
1	Th. Ramakrishnan	Pullalur	25.6	702.4	2.51	33.4	878.4	2.95	34.2	899.7	3.04
2	Th. Kamesh	Salavakkam X road	22.1	658.2	2.29	29.2	802.7	2.61	32.6	872.5	2.92
3	Th. Masillamani	Uthiramerur	24.6	711.6	2.55	28.6	781.2	2.51	30.1	864.4	2.87
4	Th. Manohar	OM Mangalam	24.1	692.5	2.46	30.2	830.5	2.73	29.8	824.8	2.71
5	Tmt. Pushpavalli	Kalur	23.2	665.8	2.30	29.8	820.4	2.69	31.1	869.4	2.91
	Average		23.92	686.1	2.42	30.24	822.64	2.69	31.56	865.56	2.89

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

Category	Scoring by farmers (Based on questionnaires)
Technology option 1	73.4
Technology option 2	88.1
Technology option 3	93.2

8 Final recommendation for micro level situation

Application of pulse wonder 2.25 kg/acre with 200 liters of water is effective for increase the yield (5 – 10%) compared to 2% DAP spray, decrease the flower shedding and increase the drought tolerance of blackgram plants.

9 Constraints identified and feedback for research

- Non availability of pulse wonder in local market
- Special care to be taken for mixing of pulse wonder product
- It is cost effective compared to DAP spray

10 Process of farmers participation and their reaction

The farmers were satisfied with foliar application of pulse wonder for blackgram to increase the yield and induced drought tolerance in blackgram.

On farm trial – 2 Agronomy

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

- 1 Title of Technology Assessed : **Assessment of planting method in Redgram**
- 2 Problem Definition : Lower yield due to improper planting method, maintenance of poor plant population, non adoption of foliar spray during flowering stage, lack of knowledge on management practices
- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	Conventional method of direct sowing
Technology option 2	TNAU, Coimbatore	Seeds dibbling by hand recommended by TNAU. Direct sowing with seed treatment (Rhizobium, Trichoderma, Phosphobacteria), NAA, pulse wonder and Thiodicarb spray.
Technology option 3	TNAU, Coimbatore	Seedling raised in polybags and transplanted on 25 – 28 days after sowing, seed treatment with (Rhizobium, Trichoderma, Phosphobacteria), NAA, pulse wonder and Thiodicarb spray.

- 4 Source of technology : TNAU, Coimbatore
- 5 Production system and thematic area : Pulses production
- 6 Performance of the Technology with performance indicators

Sl. No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined											
			Technology Option 1				Technology Option 2				Technology Option 3			
			No. of plants / m ²	No. of pods / plant	Yield Kg/ ha	BCR	No. of plants / m ²	No. of pods / plant	Yield Kg/ ha	BCR	No. of plants / m ²	No. of pods / plant	Yield Kg/ ha	BCR
1	Th. Dhanapal	Sathanancheri	1.72	230	785.2	2.14	1.85	263	880.4	2.52	1.85	242	840.1	2.36
2	Th. Muthukrishnan	Kandigai	1.65	243	720.4	1.88	1.72	282	845.2	2.38	1.85	238	805.5	2.22
3	Th. Rajendrababu	Kavithandalam	1.56	222	698.1	1.77	1.68	286	785.6	2.14	1.85	240	745.6	1.98
4	Tmt. Sabitha	Kariachery	1.60	236	718.5	1.87	1.76	278	816.5	2.26	1.85	252	771.2	2.08
5	Th. Govindasamy	Kondamangalam	1.58	210	706.2	1.82	1.70	272	830.2	2.32	1.85	248	792.3	2.16
	Average		1.62	228.2	725.6	1.90	1.74	276.2	831.5	2.32	1.85	244	790.9	2.16

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

Category	Scoring by farmers (Based on questionnaires)
Technology option 1	70.4
Technology option 2	86.2
Technology option 3	75.1

- 8 Final recommendation for micro level situation

Direct sowing method of redgram with seed treatment of Rhizobium, Trichoderma, Phosphobacteria, NAA & 2% DAP foliar spray and Thiodicarb spray to increase the higher yield (831.58 kg/ha) in redgram compared to transplanting method.

- 9 Constraints identified and feedback for research

- Special care to be taken during foliar spray of NAA & DAP spray
- Technology option 3 is cost effective method compared to other method

- 10 Process of farmers participation and their reaction

The farmers were satisfied with direct sowing of redgram cultivation gives higher yield.

On farm trial – 3 Horticulture

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

- 1 Title of Technology Assessed : **Management of chillies pest & disease complex**
- 2 Problem Definition : Yield reduction due to the incidence of pest & disease complex in chillies
- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	Chemical control with carbendazim & synthetic pyrethroids
Technology option 2	TNAU, Coimbatore	1 Spraying of mancozeb @ 2g/lit at 15 days interval 2 Set up pheromone trap @ 12 no/ha 3 Spraying of chlorpyrifos @ 2ml/lit
Technology option 3	TNAU, Coimbatore	1. Azadirachtin @ 2ml/lit on 25 DAT 2. Difenconazole 0.5 ml/lit 35 th & 60 th DAT (need based) 3. Imidachloprid @ 2ml/lit (need based) 4. P.flourescens @ 10g/lit on 40 DAT 5. Flubendiamide 25 g ai/ha 6. Set up pheromone trap 12 no/ha

- 4 Source of technology : TNAU, Coimbatore
- 5 Production system and thematic area : Irrigated vegetable production
- 6 Performance of the Technology with performance indicators

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined							
			Technology Option 1				Technology Option 2			
			Disease incidence	Pod borer incidence	Yield (MT/ha)	BCR	Disease incidence	Pod borer incidence	Yield (MT/ha)	BCR
1	C. Palani	Keelpadappai	29.5	33.2	7.8	1.56	21.9	26.4	8.4	1.68
2	S. Prabakaran	Keelpadappai	30.75	35.0	7.2	1.44	28.4	29.0	9.3	1.86
3	K. Ravi	Vellappandhal	29.15	28.7	8.9	1.78	21.7	22.8	10.8	2.16
4	K. Shanmugam	Ilanagar	29.7	29.4	9.3	1.86	20.4	21.9	11.3	2.26
5	C. Natarajan	Ilanagar	30.4	26.8	9.1	1.82	24.3	21.0	10.9	2.18
6	S. Narayanan	Ilanagar	29.9	32.8	8.8	1.76	22.8	27.4	18.8	3.76
7	K. Ganesan	Ilanagar	31.2	30.3	7.9	1.58	26.4	24.6	9.8	1.96
8	B. Manivannan	Ilanagar	30.8	29.4	8.4	1.68	20.9	21.7	10.2	2.04
9	K. Seenivasan	Ilanagar	29.7	28.7	9.3	1.86	22.4	21.1	10.4	2.08
10	P. Thanigachalam	Venbakkam	30.2	34.2	8.8	1.76	26.9	28.5	9.9	1.98
		Average	30.13	30.85	8.55	1.71	23.61	24.44	10.98	2.20

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined			
			Technology Option 3			
			Disease incidence	Pod borer incidence	Yield (MT/ha)	BCR
1	C. Palani	Keelpadappai	8.9	10.8	13.0	2.6
2	S. Prabakaran	Keelpadappai	9.7	7.4	13.4	2.68
3	K. Ravi	Vellappandhal	10.4	8.3	11.8	2.36
4	K. Shanmugam	Ilanagar	9.8	7.6	12.55	2.51
5	C. Natarajan	Ilanagar	11.2	10.9	12.3	2.46
6	S. Narayanan	Ilanagar	9.3	8.2	12.9	2.58
7	K. Ganesan	Ilanagar	8.9	8.2	13.95	2.79
8	B. Manivannan	Ilanagar	10.2	11.4	12.95	2.59
9	K. Seenivasan	Ilanagar	8.2	7.9	13.85	2.77
10	P. Thanigachalam	Venbakkam	8.4	8.5	13.70	2.74
		Average	9.5	8.92	13.04	2.61

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
Technology parameters are being done by scientist only & farmers were actively participated in collecting data. The farmers were able to record the yield data and handed over to the scientists.
8. Final recommendation for micro level situation
Technology option 3 found performed best among the 3 option for the control of pest & disease complex in chillies
9. Constraints identified and feedback for research
Farmers feel more spraying of pesticides & fungicides in laborious & costly
10. Process of farmers participation and their reaction
Farmers were actively participated in the conduct of trial. Timely application of pesticides & fungicides are being done. Farmers were closely monitoring the crop every day and changes are informed to KVK scientists.

On farm trial – 4 Animal Science

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

- 1 Title of Technology Assessed : **Assessment of oral pellet vaccine for control of Ranikhet disease in desi chicken**
- 2 Problem Definition : Mortality in desi birds
- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	No vaccination
Technology option 2	TNAU, Coimbatore	Lasota vaccine on 7 th & 14 th day & RDVK at 8 th week
Technology option 3	TNAU, Coimbatore	Oral pellet vaccine on 7 th & 14 th day & RDVK at 8 th week

- 4 Source of technology : TANUVAS
- 5 Production system and thematic area : Poultry farming
- 6 Performance of the Technology with performance indicators

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined					
			Technology Option 1		Technology Option 2		Technology Option 3	
			Disease incidence	Mortality (%)	Disease incidence	Mortality (%)	Disease incidence	Mortality (%)
1	Th. Nandagopal	Padappai	RD at 2 nd week	50	RD at 8 th day	20	RD at 10 th day	10
2	Tmt. Gowri	Konathi	RD at 2 nd week	60	RD at 9 th day	20	RD at 9 th day	20
3	Th. Palani	Vadamelpakkam	RD at 2 nd week	40	RD at 12 th day	10	RD at 12 th day	10
4	Th. Anthony	Kavanur	RD at 2 nd week	50	RD at 8 th day	10	RD at 12 th day	10
5	Tmt. Revathi	Sirukundram	RD at 3 rd week	40	RD at 10 th day	10	RD at 10 th day	10

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
 Oral pellet vaccine not easily available in the market and easy to administer since it can be mixed with the feed.
- 8 Final recommendation for micro level situation : Easy to administer and is very effective in controlling Ranikhet disease in desi chicken
- 9 Constraints identified and feedback for research : Lack of availability of the oral pellet vaccine in the open market
- 10 Process of farmers participation and their reaction : Farmers were very much interested in taking up this trial since this is a different technology which is for more easier than giving injections.

On farm trial – 5 Animal Science

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

- 1 Title of Technology Assessed : **Assessment of area specific mineral mixture for dairy cows (TANUVAS SMART mixture)**
- 2 Problem Definition : Low milk production in dairy cows
- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	No mineral mixture supplementation
Technology option 2	TNAU, Coimbatore	TANUVAS mineral mixture supplementation
Technology option 3	TNAU, Coimbatore	Area specific mineral mixture supplementation

- 4 Source of technology : TANUVAS
- 5 Production system and thematic area : Dairy farming
- 6 Performance of the Technology with performance indicators

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined								
			Technology Option 1			Technology Option 2			Technology Option 3		
			Milk yield (litres)	Onset of first oestrus after calving	No of insemination for one conception	Milk yield	Onset of first oestrus after calving	No of insemination for one conception	Milk yield (litres)	Onset of first oestrus after calving	No of insemination for one conception
1	Th. Chinnaraju	Anumanthandalam	4.0	4 months	3	4.3	3 months	2	4.5	3 months	2
2	Selvi. Thiripurasundarai	Padappai	3.5	4 months	2	3.8	4 months	1	4.0	4 months	1
3	Th. Balaji	Pillaiyarpalayam	4.5	4 months	2	4.8	3 months	2	5.0	3 months	1
4	Tmt. M. Devi	Kattankulathur	4.0	3 months	3	4.3	4 months	2	4.5	4 months	2
5	Tmt. R. Sudha	Kattankulathur	4.5	3 months	3	4.8	3 months	2	5.0	3 months	1

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
 ❖ Increase in milk yield. Animal is healthy with shining hair coat. Animal comes to heat regularly.
- 8 Final recommendation for micro level situation : The health condition, reproduction and milk yield improvement was observed and hence it is highly recommended for the dairy farmers
- 9 Constraints identified and feedback for research : Cost of the mineral mixture
- 10 Process of farmers participation and their reaction : Farmers took interest in carrying out the trial. Since the technology involved mixing the mineral mixture along with feed & were satisfied with the results.

On farm trial – 6 Animal Science

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

- 1 Title of Technology Assessed : **Synchronization of estrus in dairy cows**
- 2 Problem Definition : Performing A.I. for animals when they come for estrus at different periods
- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	AI normal
Technology option 2	TNAU, Coimbatore	CIDR and PGF _{2α} injection
Technology option 3	TNAU, Coimbatore	GNRH and PGF _{2α} injection

- 4 Source of technology : TANUVAS
- 5 Production system and thematic area : Dairy farming
- 6 Performance of the Technology with performance indicators

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined					
			Technology Option 1		Technology Option 2		Technology Option 3	
			Stage of oestrus	Conception rate (%)	Stage of oestrus	Conception rate (%)	Stage of oestrus	Conception rate (%)
1	Th. Kuppan	Thimmavaram	Dioestrus	50	Dioestrus	100	Dioestrus	100
2	Tmt. Ranjithambal	Thimmavaram	Dioestrus	60	Dioestrus	100	Dioestrus	-
3	Th. Harikrishnan	Villimbakkam	Dioestrus	50	Dioestrus	100	Dioestrus	-
4	Tmt. Mallika	Thimmavaram	Dioestrus	45	Dioestrus	100	Dioestrus	100
5	Th. Karunakaran	Athur	Dioestrus	50	Dioestrus	-	Dioestrus	100

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
Very effective and technical guidance is essential in implementation
- 8 Final recommendation for micro level situation : It is recommended for medium and large farmers having the animals with reproductive disorders
- 9 Constraints identified and feedback for research : Need technical experts in implementing the technique / procedure
- 10 Process of farmers participation and their reaction : Farmers after explaining the details of technology accepted the trial and they were satisfied since the estrus animals have conceived.

On farm trial – 7 Home Science**4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details**

- 1 Title of Technology Assessed : **Assessment of KVK nutrimix on health status of Anaemic preschool children**
- 2 Problem Definition : Iron deficiency among preschool children
- 3 Details of technologies selected for assessment : Supplementation of KVK nutrimix on Anaemic preschool children of Konathi village
- 4 Source of technology : KVK, Kattupakkam
- 5 Production system and thematic area : Health status
- 6 Performance of the Technology with performance indicators

No	Name of the Children	Name of the Village	Data on the performance indicators of the technology assessed / refined	
			Technology Option 1	
			Clinical Symptoms	Blood Hb level
1	R. Anusuya	Konathi	All the children showed general symptoms for malnutrition. Clinical symptoms of iron deficiency like anorexia, shortness of breath, fatigue, lassitude and weakness	8.1
2	S. Sumathi			11.0
3	P. Sweetha			10.9
4	Vishal			10.4
5	Rani			10.5
6	Aakash			10.0
7	Vedeswari			9.6
8	Dharani			10.7
9	Deepa			9.7
10	Preethi			10.6

No	Name of the Children	Name of the Village	Data on the performance indicators of the technology assessed / refined	
			Technology Option 2	
			Clinical Symptoms	Blood Hb level
1	Kanimozhi. H	Konathi	7 out of 10 children were free from anaemic symptoms	11.0
2	Prasanth			12.3
3	Manju			10.8
4	Divya			12.2
5	Maheswaran			12.3
6	Ramya			10.0
7	Nirmala			12.0
8	Krithika			10.4
9	Sathish			12.0
10	Keshav			12.1

No	Name of the Children	Name of the Village	Data on the performance indicators of the technology assessed / refined	
			Technology Option 3	
			Clinical Symptoms	Blood Hb level
1	G. Sharmila	Konathi	All the (10 nos.) children recovered from anemic symptoms after feeding of KVk Nutrimix	12.0
2	Dinesh			12.2
3	Gopinath			12.1
4	Santhosh			12.3
5	Logesh			12.1
6	Parthasarathy			12.0
7	Gomathi			12.2
8	Surya			12.3
9	K. Sharmila			12.3
10	Harishkanna			12.1

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
 Mothers of the children opioned that the children relished the Nutrimix and they also gained weight, improved clinical manifestation and increase in blood haemoglobin level. They also felt that the Nutrition Education given to them was very much useful to incorporate in the daily dietaries.
- 8 Final recommendation for micro level situation : Supplementation of iron rich foods to the Anaemic preschool children, will help to Improve Haemoglobin level, serum ferritin level and other iron indices. Regular consumption of green leafy vegetables will also improve haemoglobin level in the blood.
- 9 Constraints identified and feedback for research : Preparation of millets based nutrimix with incorporation of greens is a time taking process
- 10 Process of farmers participation and their reaction : Mothers of the children are very much involved in the feeding trial. They also wanted to continue the supplementation for few more months.

On farm trial – 8 Fisheries

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

- 1 Title of Technology Assessed : Herbal product for the production of disease resistant ornamental fish and low cost natural colour enhancer
- 2 Problem Definition : Reduced income to farmers due to disease outbreaks and fading of fish colour.
- 3 Details of technologies selected for assessment :

Category	Source of Technology	Details of Technology
Technology option 1	Farmers practice	Farm made feed
Technology option 2	TNAU, Coimbatore	Formulated feed with colour enhancing mix & herbal mix

- 4 Source of technology : TANUVAS
- 5 Production system and thematic area : Ornamental fish farming
- 6 Performance of the Technology with performance indicators

The formulated feed with herbal mix improved the colour of Gold fish & Koi carp with 10.72% increase in growth rate and resulted in disease resistant ornamental fishes.

Sl. No.	Name of the farmer	Village	Parameters	Data on the performance indicators of the technology assessed / refined	
				Technology option 1 (Farmers Practice) Farm made wet feed	Technology option 2 Formulated feed with herbal mix
1	Th. Shankar	Karasangal	Survival	70%	80%
2	Tmt. Vijaya	Perungalathur	Growth (Average body weight in gram for gold fish, 3 months old)	22.5 g	28 g
			Percentage increase in growth	-	19.64 %
			Body colour	Dull colour (colour fading was observed)	Bright colouration
			Occurrence of disease	Occurrence of fungal disease was noticed	No disease occurrence

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

Ornamental fish farmers realized more returns due to improvement in colour and no occurrence of diseases.

- 8 Final recommendation for micro level situation :

Formulated feed with herbal mix is highly appropriate for the production of ornamental fishes with species specific coloration and immune enhancement.

- 9 Constraints identified and feedback for research : -

- 10 Process of farmers participation and their reaction : The trial was conducted in two farmers' field with their participation since the results were encouraging the farmers were satisfied with the newly introduced formulated feed.

PART V - FRONTLINE DEMONSTRATIONS**5.A. Summary of FLDs implemented during 2010-11**

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ ST	Others	Total	
	Oilseeds	Irrigated	Rabi 2010	Groundnut	TMV13	-	Oilseed production	Introduction of HYV & ICM practices in groundnut	1.0	1.0	1	4	5	-
		Irrigated	Summer 2011	Sesame	TMV-7	-	Oilseed production	Introduction & popularization of latest variety TMV7 sesame and ICM practices	5.0	5.0	2	8	10	-
	Pulses	Irrigated	Rabi 2010	Blackgram	Co6	-	Pulses production	Popularization of ICM practices in blackgram	5.0	5.0	3	7	10	-
					VCN-4			Popularization of drought mitigation technologies in pulses (Blackgram VCN-4)						
	Cereals													
	Paddy	Irrigated	Rabi 2010	Paddy	-	Co(R)H-3	Hybrid Paddy production	Popularization of Co(R)H-3 paddy in SRI method	5.0	5.0	1	9	10	-
		Irrigated	Rabi 2010	Paddy	ADT45	-	Paddy production	Integrated pest and disease management in paddy	2.5	2.5	1	5	6	-

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)			Check	% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo					Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds																			
Groundnut	Introduction of HYV & ICM practices in groundnut	TMV13	-	Irrigated	5	1.0	28.12	23.12	25.49	18.75	35.95	27500	76494	48994	2.77 : 1	27000	56250	29250	2.08 : 1
Sesame	Introduction & popularization of latest variety TMV7 sesame and ICM practices	TMV 7	-	Irrigated	10	5.0	Trials under maturity stage and harvest to be planned at May 2011.												
Pulses																			
	Popularization of ICM practices in blackgram	CoBg6	-	Irrigated	10	5.0	8.86	8.02	8.43	6.05	39.30	13150	37974	24824	2.88 : 1	14000	27256	13256	1.94 : 1
Cereals																			
Hybrid paddy																			
Paddy	Integrated pest and disease management in paddy	ADT45	-	Irrigated	5	2.5	67.00	59.00	62.50	51.87	20.50	26320	64457	38137	2.44 : 1	27000	53490	26490	1.98 : 1

Millets																			
Vegetables	Popularization of brinjal variety Co(B)H2	-	Co(B)H2	Irrigated	10	1.0	43.8	39.2	41.5	31.4	32.17	70000	207500	96000	2.96:1	70000	157000	87000	2.24:1
	Popularization of Snakegourd variety PLR 2	PLR 2	-	Irrigated	6	1.0	16.9	15.2	16.85	11.8	43.90	30000	67400	37400	2.25:1	30000	47200	17200	1.57:1
Flowers																			
Ornamental																			
Fruit																			
Spices and condiments																			
Commercial																			
Medicinal and aromatic																			
Fodder																			
Green fodder	Popularization of fodder bank at village level	CoCN-4 Co-2 Co-1	-	Irrigated	5	1.0	2870	2440	2667	735	262	50400	213360	162960	4.23:1	22000	58800	36800	2.67:1

Plantation																			
Fibre																			
Others (pl. specify)																			

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

** BCR= GROSS RETURN/GROSS COST

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
Hybrid Paddy		
No. of Productive tillers / sq.m	322.3	240.2
Pest and disease incidence (%)	9.23	19.6
Paddy		
No. of Productive tillers / sq.m	252.82	299.5
Disease incidence (%)	11.0	23.4
Blackgram		
Germination (%)	92.81	90.0
Pest & disease incidence (%)	11.6	22.6
Groundnut		
No. of pods / plant	30.6	24.0
Pest and disease incidence (%)	10.1	18.4

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)			Check if any	% Increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./unit)				
					Demo					Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
					H	L	A											
Dairy																		
Poultry	Introduction & popularization of Nandanam turkey	Nandanam turkey	5	10 each	3.4	2.8	3	-	50	11000	54000	43000	4.91:1	11000	36000	25000	3.27:1	
	Popularization of Small scale incubators	Community incubator	5	5 each	-	-	15 chicks	-	50	125	225	100	1.8:1	125	150	25	1.2:1	
Rabbitry																		
Pigerry																		
Sheep and goat	Integrated disease management in sheep & goat	Madras red sheep & ND goats	15	20 each	20	14	16-18 kg	-	10-30%	305600	912000	606400	2.98:1	305600	688500	382900	2.25:1	
Goat	Artificial insemination of local ND goats with boer semen	NDX Boer	10	1 each	-	-	-	Trial under progress										
Duckery																		
Others (pl.specify)																		

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

** BCR= GROSS RETURN/GROSS COST

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

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

5.B.3. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m ²)	Yield (q/ha)			% Increase	*Economics of demonstration Rs./unit) or (Rs./m ²)				*Economics of check Rs./unit) or (Rs./m ²)				
					Demo		Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
					H	L	A										
Common carps	Carp farming in village ponds	Indian major carps and exotic carps	7	2000 fingerlings / acre	1120	720	920	450	51.09	26000	50600	24600	1.95 : 1	20000	24750	4750	1.24 : 1
Mussels																	
Ornamental fishes																	
Others (pl. specify)																	

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5.B.4. Other enterprises

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

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5.B.5. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check			Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy transplanter	Hiring	Popularisation of mechanisation in rice cultivation	5	1	5	50	90	5000	13500	28000	14500	2.07:1	12500	21000	8500	1.68:1

5.B.6.3 Integrated pest management demonstrations

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

5.B.6.4 Demonstrations on farm implements

Name of the implement	Area (Ha)	No. of Demo.	Name of the technology demonstrated	Labour requirement for operation (Rs./ha)		
				Demo	Local check	% change
Total						

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

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

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

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Integrated pest and disease management in paddy	The blast, brown plant hopper and sucking pest was effectively controlled by integrated pest & disease management technology delivered by KVK.
2	Hybrid paddy	Popularization of Co(R)H-3 paddy in SRI method	This hybrid recorded highest yield of 84.75 kg / ha. The farmers were satisfied and received more net income.
3	Ground nut	Introduction of HYV & ICM practices in groundnut	The farmers were satisfied about groundnut TMV-13 variety and ICM technologies and also received higher yield compared to local variety. This variety is more suitable to our Kancheepuram district.
4	Sesame	Introduction & popularization of latest variety TMV7 sesame and ICM practices	This variety recorded higher yield compared to local variety and also moderately resistant to pod borer and diseases.
5	Blackgram	Popularization of ICM practices in blackgram	The farmers were satisfied with foliar application of pulse wonder for blackgram to increase the yield and induced drought tolerance in blackgram
6	Fodder	Popularization of fodder bank at village level	The farmers recorded highest green fodder yield through cumbu napier grass, guinea grass and desmanthus compared to local grass. The farmers recorded higher milk yield through green fodders.
7	Brinjal	Popularization of Brinjal variety Co(B)H2	This variety highly suitable for Kancheepuram district during summer period and high yielder. The color of the brinjal is less accepted to this region and district, this preference fetches less price for the brinjal.
8	Snakegourd	Popularization of Snakegourd variety PLR 2	This variety yields higher and fetches nominal price in the market leads to marginal income to the farmers, performs better during the summer season.
9	Nandanam turkey	Introduction & popularization of nandanam turkey	Recommended for backyard poultry farming for it gains 3 kg at 24 weeks of age & hence farmers derived benefit by sale of turkeys at their marketing age.
10	Sheep & goat	Integrated disease management in sheep & goat	Regular vaccination & deworming of sheep & goats helped to decrease the disease incidence thereby reducing the mortality % and increase body weight gain in treated animals
11	Poultry	Popularization of Small scale incubator	Since the incubator hatches more no. of chicks farmers prefer to have one at their own field condition
12	Goat	Artificial insemination of local ND goats with boer semen	Farmers are satisfied with performance of the AI of local ND with boer semen
13	Implements	Popularisation of mechanisation in rice cultivation	
14	Implements	Popularization of drought mitigation technologies in pulses	
15	Implements	Popularisation of rotary dibbler	
16	Carp	Carp farming in village ponds	

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Integrated pest and disease management in paddy	The blast, brown plant hopper and sucking pest was effectively controlled by integrated pest & disease management technology.
2	Hybrid paddy	Popularization of Co(R)H-3 paddy in SRI method	The availability of hybrid seeds is difficult to get in local market and also there is no separate price for procurement of hybrid paddy grains.
3	Ground nut	Introduction of HYV & ICM practices in groundnut	The farmers were satisfied about groundnut TMV-13 variety and ICM technologies and also received higher yield compared to local variety. This variety is more suitable to our Kancheepuram district.
4	Sesame	Introduction & popularization of latest variety TMV7 sesame and ICM practices	This variety recorded higher yield compared to local variety and also moderately resistant to pod borer and disease.
5	Blackgram	Popularization of ICM practices in blackgram	The farmers were satisfied with foliar application of pulse wonder for blackgram to increase the yield and induced drought tolerance in blackgram and seed size is bold.
6	Fodder	Popularization of fodder bank at village level	The farmers recorded highest green fodder yield through cumbu napier grass, guinea grass and desmanthus compared to local grass. The farmers recorded higher milk yield through green fodders.
7	Brinjal	Popularization of Brinjal variety Co(B)H2	High yielding variety suitable for summer season farmers acceptance is 60% only because of the dark color it fetches less price in the market.
8	Snakegourd	Popularization of Snakegourd variety PLR 2	High yielding variety suitable for summer season.
9	Nandanam turkey	Introduction & popularization of nandanam turkey	Farmers prefer Nandanam turkey since it gains more weight than the desi turkey
10	Sheep & goat	Integrated disease management in sheep & goat	Farmers need technical intervention on following regular vaccination schedule rather than deworming their animals for better production
11	Poultry	Popularization of Small scale incubator	Cost of the incubator inhibits farmers to have one at their own farm condition. They prefer to hatch their eggs at nearby cost effective incubators.
12	Goat	Artificial insemination of local ND goats with boer semen	Technical guidance is highly essential
13	Implements	Popularisation of mechanisation in rice cultivation	
14	Implements	Popularization of drought mitigation technologies in pulses	
15	Implements	Popularisation of rotary dibbler	
16	Carp	Carp farming in village ponds	

5.B.6.8 Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	15	294	-
2	Farmers Training	5	122	-
3	Media coverage	2	8	-
4	Training for extension functionaries	-	-	-

Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Others (pl.specify)																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total																	

H-High L-Low, A-Average

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

Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify) Bamboo cultivation	1	29	19	48	1	0	1	30	19	49
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology	1	12	0	12	0	0	0	12	0	12
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils	1	6	0	6	0	0	0	6	0	6
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	3	90	3	93	4	0	4	94	3	97
Poultry Management	6	168	42	210	32	2	34	200	44	244
Piggery Management	2	49	3	52	13	0	13	62	3	65
Rabbit Management	3	43	2	45	11	1	12	54	3	57

Livestock Production and Management										
Dairy Management										
Poultry Management	4	14	46	60	14	40	54	28	86	114
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify) Awareness programme on livestock farming	7	146	407	553	14	8	22	160	415	575
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	17	43	60	-	-	-	17	43	60
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	1	40	3	43	-	-	-	40	3	43
Processing and cooking	1	60	10	70	-	-	-	60	10	70
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	7	216	122	338	-	-	-	216	122	338
Women empowerment										
Location specific drudgery production										
Rural Crafts	1	82	70	118	-	-	-	82	70	118
Women and child care										
Others (pl.specify) (NABARD Farmers Club Formation)	1	15	15	30	-	-	-	15	15	30
Agril. Engineering										
Farm machinery and its maintenance	2	40	22	62	0	0	0	40	22	62
Installation and maintenance of micro irrigation systems	2	23	14	37	4	2	6	27	16	43
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	3	110	46	156	0	0	0	110	46	156
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	1	15	7	22	4	5	9	19	12	31

Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	61	1314	1033	2313	163	195	358	1477	1228	2671

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	7	140	57	197	17	9	26	157	66	223
Bee-keeping	6	47	27	74	4	9	13	51	36	87
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	4	56	4	60	13	0	13	69	4	73
Composite fish culture	5	56	4	60	5	0	5	61	4	65

Composite fish culture	4	25	33	58	0	30	30	25	63	88
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	4	25	33	58	0	30	30	25	63	88

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										
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 Integrated farming systems for sustainable farming	2	33	6	39	4	2	6	37	8	45
Any other Fish quality management, conservation and sustainable fishing	1	18	6	24	0	0	0	18	6	24
Total	3	51	12	63	4	2	6	55	14	69

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) Carp farming & integrated fish farming with livestock and agriculture	4	89	32	121	0	0	0	89	32	121
Total	4	89	32	121	0	0	0	89	32	121

7.G. Sponsored training programmes

S.No	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables										
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) Dairy products	1	44	6	50	3	2	5	47	8	55
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	1	19	0	19	0	0	0	19	0	19
10.d.	Fisheries Management	1	18	6	24	0	0	0	18	6	24
10.e.	Others (pl.specify) Post harvest and health management in ornamental fish farming	1	19	0	19	0	0	0	19	0	19
	Carp farming	1	24	3	24	3	0	3	27	3	30
	Recent trends in livestock & fish farming	1	49	23	72	0	0	0	49	23	72
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) Integrated farming system for sustainable farming	2	30	15	45	0	0	0	30	15	45
	Total	8	203	53	253	6	2	8	209	55	264

Details of sponsoring agencies involved
ICAR, New Delhi, MPEDA, Chennai, NABARD, NGO-VIDIYAL

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

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	20	185	47	232	29	16	45	10		10
Kisan Mela										
Kisan Ghosthi										
Exhibition	12	6519	3589	10108				806	34	840
Film Show										
Method Demonstrations	5	10	48	58						
Farmers Seminar										
Workshop	4	45	30	75				85	6	91
Group meetings										
Lectures delivered as resource persons	42	1282	541	1823				15	3	18
Newspaper coverage	4									
Radio talks	36									
TV talks	1									
Popular articles										
Extension Literature										
Advisory Services	4860									
Scientific visit to farmers field										
Farmers visit to KVK										
Diagnostic visits	181									
Exposure visits										
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp	5									
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet	1 28.07.2010	11	11	22						
Self Help Group Conveners meetings	2 12.07.2010 27.10.2010		19 33	19 33						
Mahila Mandals Conveners meetings										
Celebration of important days	2									
National Nutrition week	09.09.2010	11	34	45						
International women's day	16.03.2011	0	53	53						
Any Other										
KVK NABARD AGRI CLUB Meeting	2									
KVK Vasantham Gramma Vivasaya Sangam – Kattankolathur village		10	42	52						
KVK Vettri Vivasaya Sangam- Konathi Village		5	20	25						
Total	5177	8078	4467	12545	29	16	45	926	43	959

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	Co-48		107.5 kg	2150	8
Oilseeds	Sesame			17	680	8
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds	Desmanthus			36 kg	16200	
Fiber crops		CoFs-29		44 kg	5500	
Forest Species						
Others (specify)						
Total					24530	8

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings	Cumbu Napier	Co-3		59800	17840	12
Forest Species						
Others(specify)						
Total				59800	17840	12

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Azolla	112 kgs	1,120	40
Bio-pesticide				
Bio-fungicide				
Bio Agents	Vermicompost	1250 kgs	12,500	121
Others (specify)	Panchakavya	100 lts	5,000	45
Total			18,620	206

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)	Rhodo white	1764 chicks / 1866 eggs	69413	180
Japanese Quail	Nandanam quails	1078 chicks / 1756 eggs	14292	51
Turkey	Nandanam turkey	117 eggs	825	25
Emu				
Ducks	Desi	13 eggs	39	2
Others (Pl. specify) Rabbit	New Zealand white	3 (4.5 kg)	900	3
Guinea fowl	Guinea fowl	10 nos.	1650	3
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total			87119	264

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.)

KVK, Kattupakkam is publishing Seithi Madal (Newsletter) in local dialect (Tamil) at quarterly intervals and till date three issues has been published and distributed to practicing farmers and line departments.

1. April – June 2010
2. July – September 2010
3. October – December 2010
4. January – March 2011

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			6
	Effect of chemicals on the growth of filamentous algal growth in ornamental fish farm	Dr. S.Balasundari, Dr. Cheryl Antony & Dr. D.Manikandavelu	
	Induced breeding of Koi carp for maximizing productivity	Dr. S. Balasundari, Dr. P. Kumaravel & Dr. D. Manikandavelu	
	Abstract on “Economic empowerment of fish farmers through monoculture and polyculture of freshwater prawn”	Dr. S. Balasundari & Dr. D. Manikandavelu	
	Abstract on “Empowering SHG women of Kancheepuram district through KVK trainings”	Dr. M. Vimalarani, Dr. K. Velmurugan, Th. V. Perasiryan, & Dr. P. Kumaravel	
	Constraints faced by farm women in livestock farming	Dr. K. Devaki &	

		Dr. R. Subramanian	
	Abstract on Evaluation of formulated feed to minimize runt population in <i>Macrobrachium rosenbergii</i> culture	Dr. S. Balasundari, M.J.PrinceJeyaseelan, J.Stephen Sampath Kumar, G. Indra Jasmine & R.K. Ramkumar	
Technical reports			
News letters			
Technical bulletins			
Popular articles			34
	Integrated crop management in Redgram	Th. P. Murugan & Dr. P. Kumaravel	
	Less cholesterol leads a long life (Interview)	Dr. M. Vimalarani	
	Fruit Juice to beat summer heat	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Fish farming – A lucrative enterprise	Dr. S. Balasundari	
	Medicinal uses of mango stones	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Processing of paddy	Th. V. Perasiriyam & Dr. P. Kumaravel	
	SRI paddy cultivation - Our farmer experiences	Th. P. Murugan & Dr. P. Kumaravel	
	Lemon grass production technology	Dr. K. Velmurugan & Dr. P. Kumaravel	
	Employment opportunities for women value addition of mango	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Lemon grass - scented oil yielding crop cultivation	Dr. K. Velmurugan & Dr. P. Kumaravel	
	Compost making using sugarcane traps	Tmt. R. Vaidehi & Dr. P. Kumaravel	
	Rabbit rearing for rural youth	Dr. P. Kumaravel	
	Freshwater fish farming	Dr. S. Balasundari	
	Medicinal properties of fruits	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Soil management and fodder cultivation	Th. P. Murugan & Dr. P. Kumaravel	
	Activities of soil & water testing laboratory in KVK	Th. P. Murugan	
	KVK trained Farmers' interview Production and sale of dry fish products & Carp farming	Tmt. K. Kalpana, Chemmencherry & Th. A. Manickam, Rajampettai KVK trained farmers	
	Profitable rabbit rearing	Mr. Kumar, Potheri	
	Dairy farming	Mr. Rajendra Babu, Kavithandalam	
	Organic farming	Mr. Subbu, Vallipuram	
	Value added meat products for more profit	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Farm implements for livestock farmers	Er. V. Perasiriyam	
	Control of YVMV in Bhendi	Dr. K. Velmurugan & Dr. P. Kumaravel	
	Precision farming technologies	Dr. K. Velmurugan & Dr. P. Kumaravel	
	Freshwater fish farming practices	Dr. S. Balasundari & Dr. P. Kumaravel	
	Integrated farming systems	Th. P. Murugan &	

		Dr. P. Kumaravel	
	Vermi composting	Th. P. Murugan & Dr. P. Kumaravel	
	Spirulina Culture	Dr. D. Manikandavelu, Dr. S. Balasundari & Dr. C. Navaneethakrishnan	
	Integrated farming systems for sustainable farming	Dr. P. Kumaravel, Th. P. Murugan, Dr. T. Senthil Kumar & Dr. D. Kathiresan	
	Value addition of spirulina	Dr. M. Vimalarani	
	Post harvest technology of spirulina	Dr. S. Balasundari	
Extension literature			
Booklet			3
	SRI Technology of paddy cultivation	Th. P. Murugan & Dr. P. Kumaravel	
	Integrated carp farming system	Dr. S. Balasundari & Dr. P. Kumaravel	
	Value added milk products	Dr. M. Vimalarani & Dr. P. Kumaravel	
Leaflet			12
	Preparation of spiced dry fish	Dr. S. Balasundari & Dr. P. Kumaravel	
	Preparation of fish, prawn, crab, oyster and clam pickle	Dr. S. Balasundari & Dr. P. Kumaravel	
	Rose milk	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Quail egg pickle	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Mango pickle	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Pineapple squash	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Grape squash	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Mixed fruit jam	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Chicken pickle	Dr. M. Vimalarani & Dr. P. Kumaravel	
	KVK Nutri mix	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Paneer	Dr. M. Vimalarani & Dr. P. Kumaravel	
	Transplanting of redgram	Th. P. Murugan & Dr. P. Kumaravel	
Pamphlet			2
	High yielding blackgram variety – Co6 production technology	Th. P. Murugan & Dr. P. Kumaravel	
	Hybrid paddy variety CoRH3 cultivation through SRI technique	Th. P. Murugan & Dr. P. Kumaravel	
Training Manual			
Others (Pl. specify)			
TOTAL			

10.B. Details of Electronic Media Produced

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

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

Success Story 1 – Agronomy**SRI Method of Paddy Cultivation – A boon for paddy farmers**

My name is **G. Subbaian** aged 39 years and son of Mr. Gajapathi reddy and I am doing agriculture for the last 10 years. Agriculture is my primary occupation though I have studied up to 10th class. I belong to Ammaiappanallur village of Uthiramerur block in Kancheepuram district of Tamil Nadu. I have 16 acres of land in which I cultivate paddy 7 acres, while the remaining land is used for cultivating banana and pulses. For irrigation I have one bore well and an open well. Since beginning I have been cultivating paddy in conventional method as my forefathers have done. In addition to seeds and field operations I spend significant amount of money on chemical fertilizers and pesticides. Usually the yield obtained in the conventional method of paddy cultivation is about **25 bags** (75 Kilo Grams per bag) per acre.

Due to the uncertain rains and limited availability of water coupled with non availability of labour for weeding, the farmers in my locality and myself are facing difficulties in cultivating paddy and some of them are losing interest in growing the same. In such prevailing situation, one day I met **Dr. P. Kumaravel** and **Th. P. Murugan of Krishi Vigyan Kendra (KVK)**, Kattupakkam during 2008 and got to know about SRI method of paddy cultivation. In the meeting when the KVK has informed us about the SRI method and its benefits like less water consumption, less seed, less input cost and relatively more yields; I could not believe about the method in the beginning, especially the concept of relatively less water consumption. They informed that this method requires only 2/3 as much water compared to conventional method contrary to our belief that rice grows best in standing water. When we expressed the same, the KVK explained us the background and success of the SRI method of paddy cultivation. Besides assuring us to support with continuous trainings and follow up, the KVK has also promised us to compensate if in case yield is relatively less in comparison with the conventional method, which motivated me to adopt the method. Moreover, incessantly decreasing water availability in my land was also a major cause that motivated me to take up the method.

Initially a group of interested farmers were identified in the village and imparted training on SRI method of paddy cultivation. Apart from training frequent field visits were made by KVK staff to the farmers field for plant protection and other aspects. I have received significant support from the KVK, Kattupakkam in terms of training programs, farmer field schools; follow up visits, exposure visits, literature, and farm inputs like paddy seeds, biofertilizers, conoweeder and etc. After conviction about the technology I practiced SRI method in 4 acre land and the seed variety used was **NLR 34449** and the yield obtained **45 bags** per acre. Net Income generated from the SRI method of paddy cultivation is Rs.28,250 / acre.

With the help of **KVK, Kattupakkam**, I have adopted the following practices in SRI:

- Initially I have thoroughly prepared the nursery field and applied organic manure. Then nursery field was converted into raised bed by keeping four sides tight with iron plates. Later the sprouted seeds were broadcasted in the market area.

- For seed preparation, I have taken 2.5 kgs of paddy seed and soaked them in water for 12 hours, later the water was drained and then transferred the wet seed to a gunny bag and left it for 24 hours
- Once seed was broadcasted, I had thinly spread the well decomposed FYM over the sown seed, because I was told that seeds should not be exposed directly to sun
- For the first four days, watering was done by Rosecane and once when the plants attained a height of one inch water was allowed around the bed.
- Foliar spray of 0.5% urea was sprayed on the 9th day after sowing if yellowing was observed.
- Meanwhile main field was prepared thoroughly. Bunding and Leveling were completed one day before the transplantation
- While transplanting, single seedlings were taken out carefully and planted them along with seed, root system and soil and transplanted with the help of rope marker and adopted square planting.
- After transplantation fields was irrigated with less amount of water. Ten days after planting, first weeding was done with the cono weeder and later the second and third weeding were done with 10 days interval
- During the weeding, measures were taken to incorporate the weeds in to the soil
- Irrigation was given only to wet the soil with the adoption of regular wetting and drying method.



ADVANTAGES OF SRI METHOD OF PADDY CULTIVATION:

When compared with conventional method, I have perceived the following benefits from SRI method of paddy cultivation:

- In conventional method I have used 25 Kilo grams of seed, where as in this method I have used about 2.5 Kilograms of seed per acre.
- Irrigation is given only to wet the soil, so I could save the significant amount of water which was diverted to other crops
- During cropping season I have not experienced any incidence of pests and disease to my SRI fields
- Relatively my plants developed strong root system
- Input costs were decreased due to saving on seeds, labour costs, chemical fertilizers and pesticides
- Relatively my net income was increased due to increased yield and decreased input cost
- Relatively I have got more paddy straw than the conventional method
- Seed preparation was become easy since small quantity is required

Success Story 2 – Agronomy

ICM Practices for Groundnut Cultivation

Th. B. Baskar, S/o.Th. Babu, a young farmer from padur village of Kancheepuram district. He owns about 3.5 acres of both dry and garden land. Cultivation of groundnut was his normal practice and was finding difficult to get average yield. At that time he visited KVK Kattupakkam and met Agronomy Scientist and discussed regarding lower yield of groundnut production. Scientist explained about new variety (TMV-13) of Groundnut and integrated crop management technology for groundnut during June 2010. KVK also provide critical inputs like Groundnut seed, Pseudomonas, Groundnut Rich and pesticides through our Front Line demonstration programme and made frequent field visit during crop growth stages for foliar spray & pest and diseases diagnostic.

After getting the critical inputs, he cultivated Groundnut variety TMV-13 in 1.0 acre in his land through ICM practices. At the end of season, he recorded a yield of our demo plot 1125 kgs/acre (28 bags) compared to traditional method recorded 750 kgs/acre (19 bags). He has earned net profit of Rs.22744/- through ICM method compared to traditional cultivation Rs.11700/-.

According to him, ICM method of groundnut cultivation is very easy to adopt. This technology also increased yield of 35% compared to traditional cultivation. Accordingly, input cost on ICM technology was lesser.

He cautioned that every ICM practices should be done in time then only yield will be increased. He also pointed out, basal application of gypsum 80 kgs/acre is a major role for peg formation.

He also motivated to his village farmers for adoption of ICM practice of groundnut cultivation in coming season.



Success Story 3 - Horticulture

Hybrid vegetable production through Precision Farming Technology

The potential wealth for the production of hybrid vegetables is enormous in and around Chennai and Kancheepuram district. Because of high population, demand for quality vegetables are increasing every day. The technology provided through NADP – Precision Farming scheme is bringing visible changes in vegetable production in Acharappakkam & Maduranthagam block of Kancheepuram district. The success of vegetable production throughout the year is not confined to the above blocks. Only in quantity and quality production it has brought visible changes in nearby villages. There has been transformation in attitude and potential of vegetable production as sustainable means of livelihood is now deeply imbibed by village farmers and farming has become fashionable trend in the area.

Background Precision farming technique in Hybrid Vegetable Production under NADP scheme is taken up in Kancheepuram district since September 2009. KVK was sanctioned with

8.81 lakh rupees for the implementation of precision farming scheme in 20 ha area for 20 individual progressive farmers with 50% subsidy for the installation of drip system & input materials. The drip system established with involvement of individual farmers 50% contribution which improve responsibility. The farmer to apply the new techniques at field. Irrigating the field with available water and power supply makes farmer very difficult to perform farming activity. This technique has made farmers sophisticatedly involve in farming activity.

Interventions

Process : One of the selected progressive farmers in the Precision Farming scheme is G. Devanathan, Nedungal village of Acharappakkam block. He is involved in farming activity possessing about 10 acres of land with a open well filled with 7 HP electric motor. The eligibility to take part in the NADP scheme was fulfilled by the individual farmer and with the active involvement KVK he was able to implement the technology in a phased manner.

1. Installation of drip system in 1 ha area with makes the farmer to perform even irrigation at root zone of the economic crop.
2. Chisel ploughing is the another technique adopted to enhance the water holding capacity of soil & soil aeration.
3. Quality seedling production & using of high quality F1 hybrid seedling produced in protrays and effective utilization of costly seed material. Use of water soluble fertilizers for the crop to meet the nutrient requirement of the specific crop throughout the crop period to produce quality as well as high yield Timely application of pesticide & fungicides to check pest & disease incidence of the crop.

Impact

After realizing the worth of technology the farmer himself extended upto another 5 acres during the next season with the precision farming technology. Four farmers from neighbouring village who had observed the farming technique (PF) adopted by Mr. Devanathan joined in the scheme. They totally possessed 10 acres of land in Veliyambakkam village. This has increased the area under vegetable production as well as taking up the vegetable crop alone throughout the year in the locality.

Horizontal spread

Economic gain

The production of vegetable crops is made easy for farmer Mr. Devanathan through out the year with various vegetable / flower crops and the economic returns are as follows.

Crop	Area (acre)	Yield (t/acre)	Income earned
Watermelon	1.0	19.0	57000 (Rs.3,000 /t)
African marigold	0.5	2.7	81000 (Rs.30/kg)
Cucumber	0.3	0.86	3010 (Rs.3.5/kg)
Bittergourd	0.7	12.0	60000 (Rs.5/kg)

Employment generation

The technique recommended under NADP-Precision Farming scheme rendered the farmer drudgery free to perform vegetable farming activity. The farmer could be able to perform farming activity with total available area during summer months also with the available water in his openwell.

Animal Science

Case Study On Homestead Poultry Rearing In Kancheepuram District

Situation/Background

The Poultry Industry through commercial broiler and layer farming has made rapid strides and the contribution of poultry sector to the agricultural GDP is considerably high. But the major problem confronting the resource poor farmers is the huge investment, fluctuating market, and disease incidence. The farmers of kancheepuram district are involved in backyard poultry namely desi chicken, desi turkeys and ducks for their livelihood. In recent years, backyard poultry rearing is gaining popularity among both urbanites and rural people and the demand for country chicken meat and eggs are increasing daily.

Situation at field level

About 50- 60 % of farmers of kancheepuram district are maintaining 5-10 birds to meet out the demand for chicken either for household consumption or for the local market. There was poor or low production in desi chicken which lays about 40 --60 eggs per laying season. The need of the hour for the farmers are introduction of any new variety /species which gives more number of eggs than the desi chicken and meeting the protein demand in the form of eggs and poultry meat. Disease outbreaks such as Ranikhet is posing serious threat for the backyard poultry farmers for which frequent vaccination atleast once in 6 months is being recommended by KVK.

Intervention of KVK

KVK Kancheepuram with technical backstopping from the poultry wing of Tamilnadu Veterinary and Animal Sciences University has focussed on enhancing the income generation and livelihood of the farmers by popularising their technological outcomes namely, Nandanam B2 poultry, Rhodo white chicken, Nandanam turkeys and Nandanam Quails.

Training was imparted to the farmers and farm women to increase the income from the eggs & to decrease the mortality by providing timely vaccinations. The farmers were provided with critical inputs like Nandanam turkey chicks, Japanese Quails and two week old Rhodowhite chicks for backyard rearing and were also regularly monitored through field visits and advisory service. Regular vaccination of birds for Ranikhet disease is being carried out.

Popularisation of Rhodo white chicken through FLD programme

In recent years rearing of Rhodo white chicken has gained considerable importance because of their egg laying potential. The Rhodo white chicken which is an *inter- se cross* between Rhode Island Red and white leghorn with similar phenotypic characters as that of desi chicken.

Production and Productivity (2007)

Poultry Population : 3,53,844

Egg production: 266.84 lakhs (3.76%)

Trend in Production -Desi layers(Annual compounded growth rate): - 3.22% Trend in Production-

Improved layers(Annual compounded growth rate): 9.58%

Trend in Productivity -Desi layers(Annual compounded growth rate) : 21.17% Trend in Productivity-

Improved layers(Annual compounded growth rate):18.57%

Normally a country chicken lay about 40 - 60 eggs per laying season whereas Rhodo white chicken lays 140 – 160 eggs per laying season with eggs weighing 50 – 55 gms. The Rhodo white hatching eggs are sold at the rate of Rs.6/- per egg and a day old chick is sold at Rs. 15/- per chick. The farmers get both table eggs for their household consumption and hatching eggs for artificial hatching of chicks.



Technology demonstrated	No. of Demo	Units	Yield		% Increase
			Demo	Check	
Popularisation of Rhodo white chicken for backyard poultry	10	40 birds/unit	150-170 eggs	60-80 eggs	60%
Recommendations	Recommended for backyard poultry because it lays 140 -160 eggs during laying season and hence farmers are deriving benefit by sale of table eggs and hatched chicks. Growth rate is considerably good (650 -750 gms at 16 weeks and 1200 gms at 28 weeks)				
Feedback	Rhodo white lays mature faster and lay more eggs and hence farmer's preference is high.				

Impact

The farmers of kancheepuram District namely Rajendra Babu of Kavithandalam village, S. Joseph of Palamolachar village and Mrs. Indira of Anjur village were given technical advise and inputs in the form of Rhodo white chicks during the year 2009-10. The Rhodo white chicks has attained an average weight gain of 700 gms by 16th week and 1200 gms by 28th week. Now the hens have started laying eggs and they are getting 10-15 eggs per day. The farmers incubate their eggs either naturally or artificial incubators and get their chicks.

Horizontal spread

A model unit on backyard poultry with locally available materials on low cost basis has been established at KVK, Kattupakkam for the benefit of farmers to get first hand information. On seeing the demo units, poultry farmers from surrounding villages viz Kandigai, Thirumanikuppam, Sogandi, Nookampalayam Old Perungalathur, Tambaram,, Ayyempettai, Chinna Kancheepuram, Konathi, Thirukalukundram have established backyard poultry units and other farmers on realizing the potential are approaching KVK, Kattupakkam for procurement of chicks to adopt in their villages.

In addition, Krishi Vigyan Kendra, Kancheepuram District has supplied a total of 750 Rhodowhite chicks from the KVK model hatchery to the farmers of Vellore, Cuddalore, Tiruvannamalai, and Villupuram districts through their respective KVKs.

Economic gain

The pullet eggs (table eggs) are sold at the rate of Rs. 3.00 per egg and the day old chicks are sold at the rate of Rs.15 per chick.They are getting a sizeable income of Rs.1000 to 2500 per month through sale of egg, chicks & poultry meat.

Popularisation of Homestead Japanese Quails unit

To mitigate the protein requirement, Nandanam quails were introduced among the farmers and because of less investment, less floor space requirement, shorter generation interval, farmers prefer Japanese quails(Nandanam variety) for homestead poultry rearing. Japanese Quails were popularized through FLD programme and critical inputs namely Nandanam Quail chicks were provided along with technical expertise chicks provided for eight backyard poultry farmers namely Ganapathy (Thellimedu village), Sheela (Konathi village), Vijayathavassamy (Pudhuperungulathur village), Sangeetha (Tambaram),

Mohanaraman(Nookampalayam village), Sathyamoorthy – (Walajabad), Umarani(Madhulangup pam village), Damodharan(Anjur village)

The Nandanam quails on an average attained a market weight of 180 – 200gms by the marketing age of 35 days.

Title	Introduction of Nandanam Quails
No of farmers / demo	20
Name of village Demonstrated	Thazhamedu
Input given	225 Nandanam Quails
Result	Net Profit – Rs. 2.94 / bird BCR – 1.31 Mortality – 12 %
Recommendations	As the enterprise is highly profitable, it can be practiced by large scale



Quails consumed about 450 – 500 g feed to attain 170 – 200 gm body weight. The farmers are selling Quails at the rate of Rs.20 – 25 per bird and they are getting a sizeable income of Rs. 2000 – 2300 per unit size of 500 birds.

Nandanam Turkey and its popularisation

The farmers of kancheepuram district maintain few native turkeys which attain market weight of 1.5 – 2 kg by 4 months of age. To improve the marketing weight of turkeys Nandanam turkeys developed by Poultry Research Station, Nandanam was assessed and it was found to attain a body weight of 3 kg by 4 months of age. The farmer could sell the bird at the rate of Rs. 140 per kg and he gets a profit of Rs. 150 - 200 per bird. A farmer on an average can rear 25 turkeys as a homestead backyard poultry unit along with desi chicken and on an average can earn a income of Rs. 6000 – 8000 per annum in 3 batches.

Problem Identified	Poor Performance of Native Turkeys
Solution designed	Popularisation of Nandanam Turkey
Critical input provided	Turkey chicks
Name of the village	Thalamedu
Parameters	1. Mortality - 10% 2. Body weight gain - 3 kg by 4 months of age
Recommendations	Introduction of Nandanam Turkey among the farmers



The turkey is being popularized as a backyard venture since there is good demand for turkey meat because of the closer vicinity to Chennai city. KVK, Kattupakkam, Kancheepuram District will be popularizing the Nandanam turkey on a larger scale through the FLD programme during the year 2010-11.

Sl. No.	Technology	No. of trainees	% of adoption	Change in income (Rs./month)	
				Before	After
1	Rhodo white chicken for backyard poultry	55	60	1000	2500
2	Japanese quail rearing as a backyard venture	42	40	1000	2000
3	Turkey rearing	124	30	1200	2000

A total of 91 farmers have availed the benefits of KVK with regard to Poultry rearing and they had established the poultry enterprises in their backyard. The beneficiaries not only had enhanced their knowledge level, but also skill in feeding, handling, breeding disease prevention etc., The farmers are vaccinating the birds against Ranikhet disease prophylactically on a regular basis as advocated and thus the outbreak of diseases has been drastically reduced. In addition the farmers of Kancheepuram district are imparted Hands – on training on value addition of poultry produce such as Quail egg pickle, Quail meat pickle, turkey meat patties, and other value added products. Thus there is a tremendous opportunity and growth for empowering resource poor farmers and farm women to engage in homestead poultry rearing like Rhodo white chicken, turkeys and Japanese Quails for income generation and livelihood in Kancheepuram district.

Success Story -4 Fisheries

Title Carp farming

Address A.K. Muniyandi, Poongunam village

Interventions Training on scientific carp farming practices for 2 days

Impact Area of pond – 1 acre
 Stocking density – 2000 numbers of yearling (2 inches in size)
 (Catla, Rohu & Mrigal)
 Crop period – 6 months
 Average body weight of fish – Catla – 1 kg,
 Rohu – 0.75 kg, Mrigal – 0.75 kg
 Survival - 80%

Economic gain Production – 1200kg
 Sales price – Rs.50-60/kg
 Total income – Rs.65,000
 Cost of cultivation – Rs.30,000
 Profit earned – Rs.35,000 / acre / 6 months

Title	ORNAMENTAL FISH FARMING
Background	Th. Mathivanan, Walajabad
Interventions	Training on ornamental fish farming
Impact	Area of farm – 3 cents(backyard farming) Varieties reared: all live bearers, gold and Koi carp
Economic gain	No. of cement tanks – 20 (10 x 5 ft) Income generated – Rs.60,000 Net Income realized – Rs.40,000 / year
Home Science	

A case study on Income generation of SHG women through Homecare products

Background	SHG women of Kancheepuram district were in need of new innovative technologies that will increase their livelihood. KVK provided need based training programmes especially to SHG women. SHG women require technical guidance and quality training programmes to start their enterprise. Health and hygiene are foremost importance in daily living. Houses, Industries, Hospitals, Institutions are required a large quantity of cleaning products. SHG members are interested in doing small scale enterprises like production of Homecare products. Trainings offered by KVK on Homecare products are Phenoyl, Soap oil, Soap powders, Liquid blue, Candle, Agarbathi and Computer incense sticks						
Interventions	SHG women from Maraimalai Nagar underwent training on Homecare products at KVK, Kattupakkam during the year October 2009. Group of six members involved in the production of Homecare products. The members involved are Mrs. Girija Ravikumar, Mrs. S. Sumathi, Mrs. J. Shanthi, Mrs. R. Uma, Mrs. R. Shankareswari, Mrs. B. Muthulakshmi.						
Impact	SHG women started their enterprise in the name of “Surya Mottukkal Cleaning Products”. Initially they invested Rs.2000/- and produced the cleaning products mainly phenoyl and soap oil. Now they have increased their production considerably and is as follows. <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding-right: 20px;">Phenoyl</td> <td style="padding-right: 20px;">-</td> <td>300 lt / month</td> </tr> <tr> <td>Soap oil</td> <td>-</td> <td>200 lt / month</td> </tr> </table>	Phenoyl	-	300 lt / month	Soap oil	-	200 lt / month
Phenoyl	-	300 lt / month					
Soap oil	-	200 lt / month					
Horizontal spread	They marketed their products in the nearby companies, hospitals, shops and in Madras Veterinary College. They also participated in the various fairs and exhibitions organized by DRDA and KVK. Their experiences were recorded and broadcasted by All India Radio. They also encouraged other group members to participate in the training programme and start the enterprise in a similar manner to meet the existing demand.						
Economic gain	Group income per month in Rs.15,000/- to Rs.17,000/- and the individual income is Rs.1500/- month. The income obtained is by spending 2-3 hours / day.						
Employment generation	This SHG women become entrepreneurs now, they produce and market their products by themselves with the guidance of KVK, they wish to extend their enterprise in the largescale.						

Agricultural Engineering

A Case Study on Wetland paddy drumseeder – A resourceful labour saving device for paddy farmers

Background	<p>Paddy is the major crop in Kancheepuram district cultivated in 91536 ha out of 128584 ha of net sown area. The climate of Kancheepuram district and availability of water provides favourable environment for the cultivation of paddy.</p> <p>But in Kancheepuram district, paddy production system face the serious problem of labour shortage, water shortage and lack of knowledge on farm mechanization. Majority of the farmers of Kancheepuram district are adopting conventional method paddy cultivation which involves considerable labour cost & usage of water.</p> <p>Kancheepuram district is in closer vis to Chennai and hence majority of the women & youth force (in the age group of 18 – 40) get employment in individual estates & institutes and there is a dearth of labour for agricultural activities. Hence in this situation, farmers need to adopt ecofriendly, cost effective and labour saving technology and in this context paddy drumseeder is the ideal choice for paddy farmers.</p>
Interventions	<p>KVK, Kancheepuram with technical guidance from TNAU, Coimbatore had started to demonstrate the method of rice cultivation (wetland paddy drum seeder) since 2004 onwards which need less labour and water and thereby enhancing the production and income generation.</p> <p>Initially KVK purchased one unit of wetland paddy drumseeder from TNAU, Coimbatore and demonstrated to our farm science club members.</p> <p>Then in association with CIAE extension centre, Coimbatore under their farm mechanization programme (200) This technology was demonstrated at Avalur, Thammanur villages of Kancheepuram district subsequently in collaboration with the Department of Agriculture, Kancheepuram this technology was demonstrated at Madambakkam, Agaramthen and Nanmangalam villages.</p> <p>One of the popular weekly agriculture magazine Pasumai Vigadan organized wetland paddy drumseeder demonstration programme at Padapai along with Kattupakkam KVK staff demonstrated this method of paddy cultivation under FLD programme in various parts of Kancheepuram district during 2007. In addition KVK had popularized this technology through All India Radio, Chennai and publishing articles in tamil monthly agriculture magazines.</p>
Impact	<p>With the technical support from TNAU, Coimbatore and CIAE – Extension Centre, Coimbatore KVK, Kancheepuram had provided technical support to the farmers in the form of on campus training, front line demonstration and method demonstration. The outcome of FLD programme on wetland paddy drumseeder is as follows :</p> <ul style="list-style-type: none"> ❖ Increased rice productivity (22%) ❖ Labour savings per ha ❖ BC ratio 2.64 recorded against 1.59 for conventional method of paddy cultivation

Horizontal spread

A model demo plot on wetland paddy drumseeder method of cultivation of paddy was established at KVK, Kattupakkam for the benefit of farmers to get confidence. This demonstration unit had acted as a tool for disseminate the drumseeder method of paddy cultivation to visiting farmers. Subsequently farmers from

Block	Villages	Farmers
Tirukalukundram	Madambakkam, Agaramthen, Nanmangalam, St.Thomas Block, Kariyacheri, Agastheeswara mangalam	
Uthiramerur	L. Endathur, Kaliampoondi, Chithanakavour	
Cheyur	Pooriyambakkam, Chunambedu, Irumbedu	
Kancheepuram	Kavanthandalam, Pinayur, Thamanur	
Kundrathur	Porur, Padapai, Arambakkam	
Kattankulathur	Konathi, Venbakkam	
Sriperumpudur	Ulunthai, Pattunool Chatriram	

had initially purchased this equipment and adopted this technology successfully.

In addition, KVK, Kancheepuram trained farmers from the various parts of Tamilnadu and other states and they had purchases the equipment for KVK.

With the help of Agricultural Cooperative Bank, Orakadam farmers group of that village purchased 4 sets of drumseeder and conoweeders for their usage and they have the equipment

Economic gain

Economic benefits observed by our FLD farmers / ha

Sl.No.	Details	Total Expense Conventioal method	Drumseeder method
1	Revenue from grain yield @ Rs.7/kg	35000	43351
2	Straw yield @ 0.25 /kg	2250	2500
3	Revenue	37250	45851
4	Total Expenditure	21350	15600
5	Net Profit	15900	30251
6	BC Ratio	2.64 : 1	1.59 : 1

Constraints

- ❖ Lack of Government support to popularize this technology (No Government Scheme)
- ❖ Proper care on land preparation is needed
- ❖ Care should be taken on
- ❖ Water management for first 15 days from the date of sowing

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

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Animal Science	<ol style="list-style-type: none"> 1. Hatching the duck eggs by using hens in hanged mud pots. 2. Usage of calotropis leaves in deticking of poultry to control ticks. 3. Using vasambu (Acorus calamus) and turmeric on poultry birds to control ticks, flies and mites. 4. Use of neem oil for the treatment of wounds in the animals. 5. To stimulate urination reflex, little quantity of salt placed in the vaginal track. 6. In case of foot and mouth disease neem leaves and turmeric are boiled in water, cooled, filtered and the suspension is drenched to the animals. 	

		<ol style="list-style-type: none"> 7. Oral administration of powdered gingelly with palm jaggery for treating retention of placenta in cattle. 8. Banana flowers and turmeric for treatment of diarrhea in cattle. 9. Oral administration of lime water to pregnant cows to strengthen bones. 10. For treating Infantile Genitalia, Aloe vera ½ kg, Aanai Nerunji (Tribulus terrestris) full plant ½ kg are mixed in equal proportions and given to the animals for 5 to 6 days to induce heat. 11. For Uterine treatment (pus in uterus) of cattle equal proportions Aloe vera, Aanai Nerunji (Tribulus terrestris) and Amukkra (Withania somnifera) root (½ kg each) through oral treatment for 30 to 40 days. 	
2.	Fisheries	<ol style="list-style-type: none"> 1. Neem cake and neem oil are used to control Epizootic Ulcerative Syndrome Disease in fresh water fishes. (Thiru. Ravi, Fish farmer, Thazhamedu) 2. Covering the rostrum of brood stock of fresh water prawns with plastic tube while transport to avoid damage of packing material (plastic bags). (Thiru. Samarasam, Prawn hatchery owner, Chennai) 3. Use of banana leaves for the deposition of eggs by the egg laying ornamental fishes. 4. Use of teak leaves to maintain acidic pH in the ornamental fish tanks during breeding of the ornamental fishes. 5. Placing carrot, potato pieces and banana peels in the tanks where the ornamental fish larvae are reared so as to enhance the formation of infusoria (Live feed) 	
3.	Agriculture and Horticulture	<ol style="list-style-type: none"> 1. Spraying of sheep dung mixture in cucumber crop to control insect attack. 2. Use of Notchi leaves in seed storage to control pest. 3. Application of fermented extract of neem kernel for paddy, cotton and vegetable as insecticide. 4. Spraying kerosene at 2 lt/acre after emulsifying it with soap and diluting the same with water to control leaf folder and stem borer in paddy. 5. Protection of pulse seeds using Neem seed kernel powder / neem leaf / notchi leaf / vegetable oil / red earth / ash from storage pest. 6. Allowing duck in the paddy field since it act as a predator on the leaf folder in paddy. 7. Protection of pulse seeds using 2% neem oil from storage pest. 8. Growing cambu (Bajra) as intercrop in groundnut to control leaf minor. Due to repellent action, leaf minor in groundnut is controlled. 9. To control Rhinoceros beetle in coconut, the oil extracted from castor seeds is mixed with water and filled in mud pot. Then the mud pots are placed near by coconut trees. 10. Pumpkin and ashgourd seeds are soaked in cowdung slurry overnight, which increases germination. 11. Cowdung coating for vegetable and cotton seeds to improve the vigour and viability. 12. Application of neem extracts kills snails in paddy fields. 13. Crude extract of neem leaves prevents the formation of aflatoxin in cotton bolls. 	
4.	Home Science	<ol style="list-style-type: none"> 1. Use of mud water filter to filter the drinking water 2. Use of dried flowers and leaves of Avaram as an herbal hair wash powder. 3. Use of chalk powder instead of plaster of paris for applique work on pots 4. Use of waste coconut shells in preparation of pen stand and gift articles. 	

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

Identification of courses for farmers/farm women

- Individual enquiries
- Farm Science Club convenors
- Exhibitions/ Meetings
- Mass contact Programmes
- Field/ Diagnostic visits

Rural Youth

- Individual enquiries
- Farm Science Club convenors
- Exhibitions/ Meetings
- Mass contact Programmes
- Field/ Diagnostic visits

Inservice personnel

- Discussion with Subject Matter Specialists on latest technologies

10.G. Field activities

- i. Number of villages adopted - 4
- ii. No. of farm families selected - 21
- iii. No. of survey/PRA conducted - 4

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Well functioning

1. Year of establishment : 2008
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Physical balance	1	9571
2	Hot plate	1	5991
3	pH meter	1	6783
4	Conductivity bridge	1	5712
5	Refrigerator	1	19500
6	Grinder	1	15070
7	Hot air oven	1	12777
8	Water still	1	70856
9	Chemical balance	1	99550
10	Flame photometer	1	33048
11	Spectrophotometer	1	58905
12	KEL PLUS (Digestion & Distillation Unit)	1	149926
13	Shaker	2	142796
Total			630485

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	619	515	161	15475
Water Samples	295	293	92	7375
Plant samples	-	-	-	
Manure samples	-	-	-	
Others (specify)	-	-	-	
Total	914	808	253	22850

Details of samples analyzed during the 2010-11 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	421	356	55	10525
Water Samples	189	195	14	4725
Plant samples	-	-	-	
Manure samples	-	-	-	
Others (specify)	-	-	-	
Total	610	551	69	15250

10.I. Technology Week celebration (Pongal Vizha Week)

Period of observing Technology Week: From 18.01.2011 to 21.01.2011

Total number of farmers visited : 300

Total number of agencies involved :

Number of demonstrations visited by the farmers within KVK campus : 3

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized	12	148	
Exhibition	3	200	
Film show			
Fair	1	300	
Farm Visit	1	20	
Diagnostic Practicals			
Supply of Literature (No.)	3	148	
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		300	

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
Kancheepuram	Hybrid maize – NK6240	20	35

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals – Hybrid maize	20	35
Vegetable crops		
Tuber crops		
Total		

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
28.07.2010			22
Total			

D. Animal health camps organized

State	Number of camps	No. of animals	No. of farmers
08.05.2010 Chemundi	1	214	100
03.06.2010 Thalambedu	1	605	210
13.06.2010 Koduvalli	1	215	300
03.08.2010 Chitravadi	1	84	35
18.01.2011 Vadamelpakkam	1	300	25
Total	5	1418	670

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.)/Saving	
			Before (Rs./Unit)	After (Rs./Unit)
Agronomy				
SRI method of paddy cultivation	125	65	10000 / acre	16,000 / acre
ICM technology for groundnut	54	48	9500 / acre	14,000 / acre
ICM technology for blackgram	110	62	7500 / acre	11,000 / acre
Integrated pest management in paddy	48	75	9500 / acre	13,500 /acre
Vermicompost production	62	8	-	1,500 / month
Horticulture				
Precision farming technology for vegetable production	140	100	10,000 /ha	50,000 /ha
Mushroom production	370	8	-	9000 / month
Hybrid vegetable production	290	40	9,000 / ha	16,000 / ha
IPM in vegetable production	92	40	7,000 / ha	9,000 / ha
Quality vegetable seedling production in protrays	47	35		Need to assess
Nutrient management in coconut	573	35	650 / tree	900 / tree
Fisheries				
Carp farming	391	9.72	24750/acre	50600 /acre
Backyard ornamental fish farming	64	35.94	40000 / year	60000 / year
Integrated fish farming with livestock	60	8.33	38000 / acre	65000 / acre
Ornamental fish feed production	19	5.26	12000 / year	36000 / year
Animal Science				
Nandanam turkey	140	10	2500 / month	3000 / month
Nandanam quail	130	12	1000 / month	2000 / month
Mineral mixture supplementation	410	85	32940/-	35685/-
Oral pellet vaccine – desi chicks	60	50	1500 / month	2200 / month
Agricultural Engineering				
Farm Implements for drudgery reduction	149	50.33	---	500/ac - 1500/ac
Water management	61	16.39	---	1000/month
Post harvest technology/Rodent control	168	43	----	200-500/month
Honeybee rearing	87	9.1	---	200/month-1000/month

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

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

1. Backyard poultry rearing / farming

A model unit on backyard poultry farming was established with Rhodo white chicken developed by PRS, Nandanam (TANUVAS) to get first hand information for the benefit of farmers. Many farmers procure chicks and eggs from KVK, Kattupakkam to establish the same in their farm condition which in turn enabled them to get regular supplementary income to improve their livelihood.

A farmer earns an income of Rs.1000 to Rs.2500/month through sale of table eggs hatched chicks and poultry meat @ Rs.3/egg, Rs.15/chick & Rs.80/kg respectively.

2. Supplementation of mineral mixture

The major problem encountered by the dairy farmers in many of the districts in Tamilnadu is Infertility in cattle. There are several factors involved in the infertility problem. To mitigate one of the factors namely Nutritional deficiencies leading to Infertility, TANUVAS has released TANUVAS Mineral Mixture containing essential Minerals namely Calcium, Phosphorus, Magnesium, Copper, Zinc, Cobalt etc. to supplement mineral deficiencies in the Feed of Cattle to overcome Infertility. For dairy cows 30 gms /day is advocated, and the mineral mixture produced at the feed mixing plant at Poultry Research Station, Nandanam is sold through Agricultural Technology Information Centre, Kattupakkam, KVKs and other centres of TANUVAS. On an average 300 kgs of Mineral Mixture is sold per month through ATIC. The farmers who had administered TANUVAS Mineral Mixture to cattle have opined that the animals come & estrus regularly and the conception rate has increased. The milk yield per animal has also increased by 500 ml per day which has resulted in the additional income of Rs.150-200 / month / animal.

3. Oyster mushroom production (40 Individuals gained self-employment and earning Rs.2000/month)
4. Ornamental fish production
5. Fodder production (Large scale adoption of intensive fodder and fodder seed production due to shrinkage of grazing land in Kancheepuram district)
6. Precision Farming Technology for cultivation of vegetable crops is emphasized and demonstrated through farmers association. 20 farmers have adopted this technology for the cultivation of vegetable crops. This scheme is being implemented at the cost of Rs.8.84 lakhs under NADP Scheme.
7. Cultivation of medicinal crops is also being emphasized through farmers associations in collaboration with State Department of Horticulture.

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Sl.No	Name of organization	Nature of linkage
Government Organizations		
1	State Department of Animal Husbandry	Participation in meetings, conducting training programmes, demonstration, etc.
2	State Department of Agriculture	
3	State Department of Horticulture	
4	State Department of Fisheries	
5	State Department of Agricultural Engineering	
6	National Seeds Corporation	For implementing FLD programme
7	Tamil Nadu Fisheries Development Corporation	For conducting training programmes and demonstration
8	State Institute for Rural Development (SIRD)	
9	DRDA, Kancheepuram	For conducting training programmes
10	Women Development Corporation, Chennai	
11	State Bank of India, Chennai Division	
12	Zonal Research Centre, TNAU, Coimbatore	For supply of farm implements and demonstrations
13	TNAU, Coimbatore	

14	Central Institute of Agrl. Engg., Coimbatore.	For conducting training and demonstrations
15	Ministry of food processing Industries	
16	NABARD, Chennai	
17	National Horticulture Board	
18	Central Institute of Brackish water Aquaculture, Chennai	
Non-Governmental Organizations		
19	Nehru Yuva Kendra, Sriperumpudur	<i>Training and demonstration</i>
20	DHAN Foundation, Chengalpattu	
21	M.S. Swaminathan Research Foundation, Chennai	
22	ASSEFA, Pooriampakkam	
23	Unorganised Workers Federation, Chennai	

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

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Demonstration of Precision Farming System in Tamilnadu (20ha area in Kancheepuram District)	17.11.2008	TNAU under NADP Scheme	8,84,000

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/ No

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

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	13.08.2010	Meeting – 1		
02	Research projects				
03	Training programmes		16		
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition	29.05.2010	1		
	Soil health camps				

	Animal Health Campaigns				
	Others (Pl. specify) Farmers Field School		3		
06	Publications				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

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

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

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

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

12.F. Details of linkage with RKVY

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

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2010	22	825	
May	18	825	
June	22	825	
July	25	825	
August	27	825	
September	30	825	
October	25	825	
November	19	825	
December	28	825	
January 2011	26	825	
February	17	825	
March	10	825	

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. (kgs)	Cost of inputs	Gross income	
1.	Japanese Quail	2010	300 sq.ft.	Nandanam Quail	Chicks	1078	6000	14292	Maintained as a demo unit for trainees
					Eggs	1756			
2.	Poultry	2009	300 sq.ft.	Rhodo white chicken	Chicks		17000		Maintained as a demo unit for trainees
							Eggs	1866	
3.	Turkey	2009	100 sq.ft.	Nandanam Turkey	Chicks	-			Maintained as a demo unit for trainees
							Eggs	117	
4.	Rabbit	2009	400 sq.ft.	New Zealand white	rabbit	3		900	Maintained as a demo unit for trainees
5.	Mushroom	2009	210 sq.ft.	Oyster mushroom	-	50.525	10990	3838	Maintained as a demo unit for trainees
6.	Vermicompost	2009	60 sq.ft.	Euginea Eudrillus	Manure	1250		12500	Maintained as a demo unit for trainees
7.	Azolla	2009	60 sq.ft.	Azolla Pinnata	seed	112		1120	Maintained as a demo unit for trainees
8.	Medicinal plants	2009	5 cents		-				Maintained as a demo unit for trainees
9.	Honey bee	2009	5 boxes	Indian bee	-				Maintained as a demo unit for trainees
10.	Drip Irrigation system	2008	1 ha	Guava, Mango	Fruits	100.5	600	804	Mango –60% of plants wilted due to unexpected fire accident Guava - new juvenile establishment.
11.	Guinea fowl	2009	50 sq.ft	Guinea fowl	Chicks	10		1650	Maintained as a demo unit for trainees
12.	Ducks	2010	15 sq.ft	Desi	eggs	13		39	Maintained as a demo unit for trainees
13.	Ornamental plants					157		785	Maintained as a demo unit for trainees
14.	Shadenet nursery (vegetable seedlings)	2010				17680		8840	Maintained as a demo unit for trainees

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
1. Cereals									
a. Paddy	10.11.10	21.03.11	0.5	CoR-49	Seeds	1000 kgs	10,800	20,000	Stock in position.
b. Paddy	20.12.10		0.5	ADT -43	Grains				Yet to take up harvest. Crop is in seed harvesting stage
c. Paddy	19.11.09	22.03.10	0.24	CoR-48	Parboiled rice	500 kgs	7300	12500	Last year stock as paddy is being converted in to parboiled rice & sold @ Rs.25/kg
d. Paddy	19.11.09	09.03.10	0.12	ADT-43	Parboiled rice	100 kgs	3250	2500	
2. Pulses									
a. Blackgram	28.01.11		0.12	Co-6	Grains				Crop is in maturity phase. Yet to take up harvest
Blackgram	12.02.10	16.04.10	0.12	TMV-1	Grains	41 kgs	2000	3280	Last year stock cleared by selling as grains @ Rs.80/kg
b. Cowpea	06.02.10	12.04.10	0.12	CoCP-1	Grains	42 kgs	1800	2310	Last year stock cleared by selling as grains @ Rs.55/kg
Oilseeds									
Sesame	24.05.10	13.08.10	0.12	TMV-3	Seeds	17 kgs		680	Yield reduced because of showers caused by depression during harvest
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Mango orchard									
Guava orchard	April 2008		0.6	Lucknow – 46	Fruits	100.5	2500	804	Intruded by villagers as the old juvenile has been removed so as to facilitate new juvenile establishment
Vegetables									
Bhendi	31.03.10	10.05.10	0.12	NS-301	Vegetable	807.50		11305	

		to 28.07.10							
Vegetable seedlings (protrays)									
Brinjal						13170		6585	
Chillies						3530		1765	
Tomato						980		490	
Others (specify)									
Mushroom						50.525		3838	
Ornamental plants						157		785	
Fodder Sorghum	15.06.10	03.10.10	0.1	CoFs-29	Seeds	15 kgs	1900	1875	Stock in position
Fodder Sorghum	07.01.11		0.2	CoFs-29	Seeds				Crop is in flowering stage
Desmanthus	07.03.11		0.12						Crop is in vegetative phase
Desmanthus 2 nd ratoon crops	16.02.10	07.06.10	0.2		Seeds	20 kgs	6300	8550	Sold through ATIC @ 450/kg rebate 5% (4 kgs stock in hand)
Desmanthus	05.10.10	03.02.11	0.12		Seeds	20	4500	8550	
Cumbu Napier hybrid grass			0.2	Co-3	Slips	59800 nos		17840	Slips sold to farmers
Millet, Ragi	08.07.10	12.10.10	0.12	Co-14	Grains	20 kgs		200	
Green manure									
Daincha	25.09.10	18.11.10	0.5	Sesbania sp	Green manure		1500		Ploughed insitu for paddy cultivation
Sunnhemp	02.08.10	20.10.10	0.5	Crotalaria sp	Green manure		1500		Ploughed insitu for paddy cultivation

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

Sl.No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Azolla	350 kgs	2500	3500	Silpauline sheet can be utilized for another 6 months. 250 kgs utilized in paddy field

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

Sl. No.	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Dual purpose poultry	Rhodo white	Chicks / eggs	1764 / 1866	15750	69413	To increase the income, we have established incubators for hatching chicken eggs
2.	Turkey	Nandanam	Eggs	117		825	To increase the income, we have established incubators for hatching turkey eggs
3.	Rabbit	New Zealand white soviet chinchilla	Breeding	3		900	Steps taken to increase the productivity in rabbits
4.	Quail	Japanese Quail	Chicks /eggs	1078 / 1756		14292	To increase the income, we have established incubators for hatching quail eggs

13.E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2010	14	2	
May 2010	0	0	
June 2010	37	1	
July 2010	30	1	
August 2010	8	1	
September 2010	30	3	
October 2010	10	1	
November 2010	11	3	
December 2010	20	1	
January 2011	11	1	
February 2011	17	2	
March 2011	0	0	

13.F. Database management

S. No	Database target	Database created

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	Union Bank of India	Guduvancherry	201	Associate Professor and Head, KVK, Kattupakkam	622202010000833		

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

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

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

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	9342000		7548044
2	Traveling allowances	125000		124857
3	Contingencies	0		0
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	250000		250000
B	POL, repair of vehicles, tractor and equipments	210000		210000
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	100000		100000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	40000		40000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	195000		194996
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	90000		90000
G	Training of extension functionaries	25000		25000
H	Maintenance of buildings	30000		30000
I	Extension Activities	30000		30000
J	Farmers' Field School	25000		25000
K	Library (Purchase of Journal, Periodicals, News Paper & Magazines)	5000		4990
TOTAL (A)		10467000		8672887
B. Non-Recurring Contingencies				
1	Equipments & Furniture			
a	Furniture & furnishing	500000		499811
b	Portable Carp Hatchery	225000		225000
c	Power tiller	150000		150000
d	EPABX System	50000		49882
2	Works			0
a	Repair & renovation	1250000		1250000
b	Bore well	200000		200000
c	Demo units (2)	320000		320000
d	Irrigation System	200000		200000
3	Library (Purchase of assets like books & journals)	10000		10000
4	Vehicle			0
TOTAL (B)		2905000		2904693
C. REVOLVING FUND		0		
GRAND TOTAL (A+B+C)		13372000		11577580

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2008 to March 2009	87,020.70	5,05,860	4,79,839	1,13,041.70
April 2009 to March 2010	1,13,041.70	2,12,920	1,83,530	1,42,431.70
April 2010 to March 2011	1,42,431.70	5,46,426	5,05,317	1,83,540.70

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. P. Kumaravel & Dr. M. Vimalarani	Programme Coordinator & Assistant Professor	Seminar on Value added products from agricultural produces	ATMA project, Namakkal	17.04.10
Dr. K. Velmurugan	Assistant Professor	Seminar on Department of Agriculture Marketing & Agri Business	IAMWARM Scheme, State Department of Agriculture	25.04.10
Dr. S. Balasundari	Associate Professor	National seminar on technology & trade prospects in Ornamental Aquaculture	MVC, Chennai	29.04.10 & 30.04.10
Dr. K. Velmurugan	Assistant Professor	National Conference on "Horticultural Bio Diversity for Livelihood, Economic Development and Healthcare"	University of Horticultural Sciences, Bangalore	28.05.10 to 31.05.10
Dr. K. Velmurugan & Selvi. S. Vanitha Devi	Assistant Professor & Prog. Asst. (Computer)	Seminar on Any Time KVK (ATK) organized by DDG (Ag. Extn.) through KVK Hub, Ernet network	KVK, Kattupakkam	31.07.10
Dr. K. Velmurugan	Assistant Professor	National consultation workshop on Strategies & Development of Classical Biological Control of Mealy Bugs	NBAII, Bangalore	30.10.10
Dr. P. Kumaravel	Programme Coordinator	Training on Partnering of KVKs with NABARD initiatives	BIRD, Lucknow	01.11.10 to 04.11.10
Tmt. S. Mirunalini	Farm Manager	Training on Azolla Multiplication	Vivekanandha Kendra, Kanyakumari	11.11.10 to 13.11.10
Dr. K. Devaki	Assistant Professor	Training on Alternative poultry farming as a livelihood for farming community	KVK, Namakkal	24.11.10 to 26.11.10
Er. V. Perasiriyam & Dr. M. Vimalarani	Assistant Professor	21 days refresher course on 'Nano Science'	University of Madras	18.11.10 to 08.12.10
Dr. K. Devaki	Assistant Professor	Refresher course on Faculty Development for Assistant Professors	Madras Veterinary College, Chennai – 7	01.12.10 to 21.12.10
Dr. S. Balasundari	Associate Professor	Seminar on Asian – Pacific Aquaculture 2011 and Giand Prawn 2011	College of fisheries, Panangad, Kochi	17.01.11 to 20.01.11
Dr. M. Vimalarani & Dr. K. Devaki	Assistant Professor	Training on Strengthening Gender Perspective in Agricultural Research & Extension	TANUVAS, Chennai – 51	24.01.11 to 25.01.11
Dr. S. Balasundari	Associate Professor	Aqua Aquaria 2011 – An international exhibition cum seminar on Aqua culture and ornamental fish organized by MPEDA, Kochi	Trade centre, Chennai	08.02.11

Progressive farmers of vegetable growers		Training on Progressive farmers of Precision farming scheme and Consultative meet on marketing strategies	Directorate of Extension Education, TNAU, Coimbatore	15.02.11
Th. P. Murugan	Assistant Professor	21 days training programme on "Productivity enhancement in drylands through diversified farming options"	CAFTA, TNAU, Coimbatore	27.01.11 to 16.02.11
Dr. M. Vimalarani	Assistant Professor	Training on Recent trends in "Post Harvest Technologies"	Indian Institute of Crop Processing Technology, Tanjavur	23.03.11 to 25.03.11
Dr. K. Devaki	Assistant Professor	Training on Statistical tools for social scientists.	Madras Veterinary College, Chennai	23.03.11 to 25.03.11
Dr. K. Velmurugan	Assistant Professor	Training on Protected cultivation of horticultural crops	DoEE, TNAU, Coimbatore	28.03.11 & 29.03.11
Th. P. Murugan	Assistant Professor	Training on Weather based agro advisory service	DoEE, TNAU, Coimbatore	30.03.11 & 31.03.11
Selvi. S. Vanitha Devi	Prog. Asst. (Computer)	Training on Database management, web content development and web hosting	DoEE, TNAU, Coimbatore	29.03.11 to 31.03.11

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

Dr. P. Kumaravel, Programme Coordinator and Head, KVK, Kattupakkam along with the Vice-Chancellor, TANUVAS received the National Best KVK Award – 2009 from Her Excellency the President of India during the inaugural function of the Fifth National Conference of KVKs at Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan on 22.12.2010.

SUMMARY FOR 2010-11

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Blackgram	Assessment of the performance of pulse wonder in pulses	5
Varietal Evaluation			
Integrated Pest Management	Chillies	Management of pest and disease complex in chillies	10
Integrated Crop Management	Redgram	Assessment of planting method in redgram	5
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Mushroom cultivation			
Total			20

Summary of technologies assessed under livestock

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

Summary of technologies assessed under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials
Ornamental fish farming	Ornamental fish farming	Assessment of formulated feed fortified with herbal mix for colour and immune enhancement	2

Summary of technologies assessed under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials
Health status	Health status	Assessment of KVK nutrimix on health status of Anaemic preschool children	Supplementation period 5 months

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			

Summary of technologies refined under various enterprises

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

Summary of technologies refined under home science

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

Medicinal and aromatic																		
Fodder																		
Green fodder		Popularization of fodder bank at village level		5	1.0	2667	735	262			50400	213360	162960	4.23:1	22000	58800	36800	2.67:1
Plantation																		
Fibre																		
Others (pl.specify)																		
	Total																	

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

** BCR= GROSS RETURN/GROSS COST

Others (pl.specify)																			
	Total																		

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

** BCR= GROSS RETURN/GROSS COST

Fisheries

Category	Themati c area	Name of the technolo gy demonstr ated	No. of KVK s	No. of Farme r	No.of units	Major parameters		% chang e in major param eter	Other paramet er		*Economics of demonstration (Rs.)				*Economics of check (Rs.)				
						Demons tration	Check		De mons trati on	C hek k	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BC R	
Common carps		Carp farming in village ponds		7	2000 finge rlings / acre	920	450	51.09			26000	50600	24600	1.95 :1	20000	24750	4750	1.24 :1	
Mussels																			
Ornamenta l fishes																			
Others (pl.specify)																			
	Total																		

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

** BCR= GROSS RETURN/GROSS COST

Other enterprises

Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify) Bamboo cultivation	1	29	19	48	1	0	1	30	19	49
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology	1	12	0	12	0	0	0	12	0	12
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils	1	6	0	6	0	0	0	6	0	6
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	3	90	3	93	4	0	4	94	3	97
Poultry Management	6	168	42	210	32	2	34	200	44	244
Piggery Management	2	49	3	52	13	0	13	62	3	65
Rabbit Management	3	43	2	45	11	1	12	54	3	57

Livestock Production and Management										
Dairy Management										
Poultry Management	4	14	46	60	14	40	54	28	86	114
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify) Awareness programme on livestock farming	7	146	407	553	14	8	22	160	415	575
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	17	43	60	-	-	-	17	43	60
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	1	40	3	43	-	-	-	40	3	43
Processing and cooking	1	60	10	70	-	-	-	60	10	70
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	7	216	122	338	-	-	-	216	122	338
Women empowerment										
Location specific drudgery production										
Rural Crafts	1	82	70	118	-	-	-	82	70	118
Women and child care										
Others (pl.specify) (NABARD Farmers Club Formation)	1	15	15	30	-	-	-	15	15	30
Agril. Engineering										
Farm machinery and its maintenance	2	40	22	62	0	0	0	40	22	62
Installation and maintenance of micro irrigation systems	2	23	14	37	4	2	6	27	16	43
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	3	110	46	156	0	0	0	110	46	156
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	1	15	7	22	4	5	9	19	12	31

Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	61	1314	1033	2313	163	195	358	1477	1228	2671

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	7	140	57	197	17	9	26	157	66	223
Bee-keeping	6	47	27	74	4	9	13	51	36	87
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	4	56	4	60	13	0	13	69	4	73

Composite fish culture	4	25	33	58	0	30	30	25	63	88
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	4	25	33	58	0	30	30	25	63	88

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										
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 Integrated farming systems for sustainable farming	2	33	6	39	4	2	6	37	8	45
Any other Fish quality management, conservation and sustainable fishing	1	18	6	24	0	0	0	18	6	24
Total	3	51	12	63	4	2	6	55	14	69

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) Carp farming & integrated fish farming with livestock and agriculture	4	89	32	121	0	0	0	89	32	121
Total	4	89	32	121	0	0	0	89	32	121

Sponsored training programmes

S.No	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables										
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) Dairy products	1	44	6	50	3	2	5	47	8	55
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	1	19	0	19	0	0	0	19	0	19
10.d.	Fisheries Management	1	18	6	24	0	0	0	18	6	24
10.e.	Others (pl.specify) Post harvest and health management in ornamental fish farming	1	19	0	19	0	0	0	19	0	19
	Carp farming	1	24	3	24	3	0	3	27	3	30
	Recent trends in livestock & fish farming	1	49	23	72	0	0	0	49	23	72
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) Integrated farming system for sustainable farming	2	30	15	45	0	0	0	30	15	45
	Total	8	203	53	253	6	2	8	209	55	264

Details of sponsoring agencies involved
ICAR, New Delhi, MPEDA, Chennai, NABARD, NGO-VIDIYAL

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	4860			4860
Diagnostic visits	181			
Field Day	20			20
Group discussions				
Kisan Ghosthi				
Film Show				
Self -help groups	2	52		52
Kisan Mela				
Exhibition	12	10108	840	10948
Scientists' visit to farmers field				
Plant/animal health camps				
Farm Science Club	1	22		22
Ex-trainees Sammelan				
Farmers' seminar/workshop	4	75	91	166
Method Demonstrations	5	58		58
Celebration of important days	2	98		
Special day celebration				
Exposure visits				
Others (pl.specify) Lectures delivered as resource persons	42	1823	18	1841
KVK NABARD Agri Club Meeting	2	77		77
Total				

Details of other extension programmes

Particulars	Number
Electronic Media	
Extension Literature	
News Letter	4
News paper coverage	4
Technical Articles	
Technical Bulletins	
Technical Reports	
Radio Talks	36
TV Talks	1
Animal health camps (Number of animals treated)	1418 animals
Others (pl.specify)	
Total	

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	Co-48	107.5 kg	2150	8
Oilseeds	Sesame		17	680	8
Pulses					
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds	Desmanthus		36 kg	16200	
Fiber crops		CoFs-29	44 kg	5500	
Forest Species					
Others					
Total				24530	16

Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Number	Value (Rs.)	Number of farmers
Commercial					
Vegetable seedlings					
Fruits					
Ornamental plants					
Medicinal and Aromatic					
Plantation					
Spices					
Tuber					
Fodder crop saplings	Cumbu Napier	Co-3	59800	17840	12
Forest Species					
Others					
Total			59800	17840	12

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers	Azolla	112 kgs	1,120	40
Bio-pesticide				
Bio-fungicide				
Bio Agents	Vermicompost	1250 kgs	12,500	121
Others	Panchakavya	100 lts	5,000	45
Total			18,620	206

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)	Rhodo white	1764 chicks / 1866 eggs	69413	180
Japanese Quail	Nandanam quails	1078 chicks / 1756 eggs	14292	51
Turkey	Nandanam turkey	117 eggs	825	25
Emu				
Ducks	Desi	13 eggs	39	2
Others (Pl. specify) Rabbit	New Zealand white	3 (4.5 kg)	900	3
Guinea fowl	Guinea fowl	10 nos.	1650	3
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total			87119	264

Production/ Sale of Farm implements

Name of the Implement	Number	Value (Rs.)	Number of farmers
Wetland paddy drum seeder	40	168000	40
Bandicoot trap	26	10400	26
Rat trap	47	14000	47
Coconut climber	3	7500	3
Cono weeder(Single)	2	1200	2
Dry land weeder	12	9600	12
Conoweeder	14	18200	14
Paddy drum seeder Custom hiring	5	500	5
	Total value	2,29,400	

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	421	356	55	
Water	189	195	14	
Plant	-	-	-	
Manure	-	-	-	
Others (pl. specify)	-	-	-	
Total	610	551	69	

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
1 – 26.02.10

IX. NEWSLETTER

Number of issues of newsletter published
4

X. RESEARCH PAPER PUBLISHED

Number of research paper published
6

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

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

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