

# **ANNUAL REPORT 2014-15**

**(FOR THE PERIOD APRIL 2014 TO MARCH 2015)**

**KRISHI VIGYAN KENDRA (IDUKKI)**

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
Bapooji Krishi Vigyan Kendra, Santhanpara P.O., Idukki (Dt.), Pin-685619, Kerala.	04868 – 247541, 247715.	Nil	kvksanathanpara@gmail.com	www.kvkidukki.org

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Bapooji Sevak Samaj, Kakkattu, Meenadom P.O., Pampady, Kottayam (Dt.), Pin-686 516, Kerala.	0481-2506271 +91 9446826019	04868-247048	bkvkchairperson@gmail.com	www.kvkidukki.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
<b>Dr. Binu John Sam</b> , Programme Coordinator i/c.	Nil	+91 9061628822	binujohnsambkvk@gmail.com

**1.4. Year of sanction: 1994.****1.5. Staff Position (as on 31<sup>st</sup> March 2015)**

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asst.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Vacant	Programme Coordinator	-	-	-	-	-	-	-	-
2	SMS	Dr. S. Jayababu	Subject Matter Specialist	M	Animal Science	B.V.Sc. & AH	15600-39100	21000	19-06-1995	Permanent	Others
3	SMS	Manju Jincy Varghese	Subject Matter Specialist	F	Soil Science	M.Sc. Agriculture (Soil Science)	15600-39100	21000	10-01-2011	Permanent	Others
4	SMS	Dr. Benjamin Mathew	Subject Matter Specialist	M	Agri. Extension	Ph.D. Horticulture	15600-39100	21000	17-01-2011	Permanent	Others
5	SMS	Dr. Binu John Sam	Subject Matter Specialist	M	Horticulture	Ph.D. Horticulture	15600-39100	21000	17-01-2011	Permanent	Others
6	SMS	Sudhakar Soundarajan	Subject Matter Specialist	M	Plant Protection	M.Sc. Agricultural Entomology, MBA	15600-39100	21000	27-01-2011	Permanent	OBC
7	SMS	Vacant	Subject Matter Specialist	-	Agronomy	-	-	-	-	-	-
8	Programme Assistant (Lab Tech.) / T-4	Jayisy Joseph	Programme Assistant	F	Home Science	M. Sc. Home Science (Extension for Rural Development)	9300-34800	13500	20-06-1995	Permanent	Others
9	Programme Assistant (Computer) / T-4	Biju Narayanan	Programme Assistant	M	Computer Application	M.C.A., PGDCA	9300-34800	13500	01-10-2007	Permanent	OBC
10	Programme Assistant/ Farm Manager	Rachel Skariakutty	Programme Assistant	F	Rural Craft	M.A. Sociology (P.G. Diploma in Rural Development)	9300-34800	13500	05-06-1995	Permanent	Others
11	Assistant	Shaji. K. Kakkattu	Assistant	M	-	-	9300-34800	13500	05-06-1995	Permanent	Others
12	Jr. Stenographer	Daisy Daniel	Jr. Stenographer	F	-	-	5200-20200	7100	05-06-1995	Permanent	Others
13	Driver	P. Nandagopal	Driver	M	-	-	5200-20200	7200	05-06-1995	Permanent	OBC

14	Auxiliary Staff	K.T. Mathew	Peon/Messenger	M	-	-	5200-20200	7000	05-06-1995	Permanent	Others
15	Supporting Staff-1	K.O. Jose	Skilled Supporting Staff-1	M	-	-	5200-20200	7000	05-06-1995	Permanent	Others
16	Supporting Staff-2	P. Sabu	Skilled Supporting Staff-2	M	-	-	5200-20200	7000	05-06-1995	Permanent	Others

### 1.6. Total land with KVK (in ha) : 27.60 ha.

S. No.	Item	Area (ha)
1	Under Buildings	0.074 ha
2.	Under Demonstration Units	0.5 ha
3.	Under Crops	0.5 ha
4.	Orchard/Agro-forestry	0.5 ha
5.	Others	26.026 ha

### 1.7. Infrastructural Development:

#### A) Buildings

Sl. 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	2002	740	47,85,208.10	-	-	-
2.	Farmers' Hostel	NA	-	-	-	-	-	Master Plan & Estimate submitted. Sanction pending.
3.	Staff Quarters	NA	-	-	-	-	-	-
4.	Demonstration Units							
	1. Duck cum fish culture unit.	RF	2009	50	7,000.00	-	-	-
	2. Mushroom unit	Grama Panchayat, Santhanpara	2002	10	85,000.00	-	-	-
	3. Spawn production unit	SHM	2009	10	3,00,000.00	-	-	-
	4. Mist Chamber	SHM	2009	96	2,72,832.00	-	-	-
	5. Rain Shelter	SHM	2009	50	1,04,091.00	-	-	-
5	Fencing	NA	-	-	-	-	-	Urgent requirement as the area is constantly facing intrusion of wild animals and other intruders
6	Rain Water harvesting system	NA	-	-	-	-	-	-
7	Threshing floor	NA	-	-	-	-	-	-
8	Farm godown	NA	-	-	-	-	-	-
9	Vehicle garage							Urgently required

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Mahindra Bolero SLE	May - 2012	5,78,380.36	61561.2	Good condition.
Honda Aviator	March - 2009	50,000.00	10279	Running condition, needs servicing
Motor Bike (Suzuki Shogun)	January - 1995	37,972.78	8864	Not in use.

**C) Equipments & AV aids**

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
<b>A.V. aids (Specify)</b>			
Television	1995	20,894.00	Not working
GE OHP	1996	7,100.00	Good, but not in use
ZETT Slide Projector	1996	11,556.00	Not working
Sharp Video Player	1996	10,000.00	Not working
Pentax SLR Camera	1996	13,599.15	Not working
Ahuja Amplifier SSA 160 636956	2003	7,010.00	Good Condition
Ahuja Speaker, SRX50DX	2003	1,825.00	Good Condition
Ahuja Mike SHM 1000XLR	2003	2,295.00	Not in use
Ahuja Mike ASMT 80 XLR	2003	1,470.00	Good Condition
Ahuja mike Stand DGV	2003	510.00	Good Condition
Ahuja Mike stand DGT	2003	295.00	Good Condition
Ahuja portable teaching wireless WA 320 AWL 321	2003	9,700.00	Good Condition
Honda generator Model EBK 2000 AC	2003	32,490.00	Good Condition
LPG Generator 5000 CLS	2011	100000.00	Good Condition
LCD Projector (EPSON_EBW8)	2010	55186.00	Good Condition
Liberty Show Juno 5 x 7 (MW) Screen	2010	5885.00	Good Condition
Kodak Knoma Camera	1995	1550.00	Obsolete
Tripod Screen 52x70 inch	1996	2029.50	In Working condition
<b>Soil Science Lab Equipments (Specify)</b>			
KEMI HOT PLATE with Energy Regulator	2006	5,400.00	Bad
Electronic Balance	2006	1,00,000.00	Under use but needs repair
Physical Balance	2006	8,991.00	Good
Spectrophotometer	2006	1,17,499.00	Under use but needs repair
Electronic Automatic KEL PLUS model KES 12L (Nitrogen Analyzer)	2006	97,043.00	Under use but needs repair
Conductivity Meter (PH Meter Utech 510)	2006	21,935.00	Under use but needs repair
HOT AIR OVEN	2006	13,725.00	Good
Water bath WDB2 350 x 400 100mm Size 12	2006	41,895.00	Good
Flame Photometer	2006	45,000.00	Under use but needs repair
Conductivity Meter	2006	13,500.00	Not working and requires new
LG 280 Litre Fridge Model – GI 296 TM V-Guard Stabilizer	2006	250.00	Good
Mixer grinder 750 Watts	2006	4,500.00	Bad and requires new
Online UPS System with Battery	2006	36,916.00	Needs repair
Fume Cupboard KEMI	2006	2,68,192.00	Good
<b>Bio-control Lab Equipments</b>			
Laminar Flow Chamber	2000	50,000.00	Under use but needs repair
Refrigerator	2000	10,760.00	Under use but needs repair
Chemical Balance	2000	1,800.00	Bad and required new
Auto Clave	2000	19,000.00	Bad and required new
Step up Stabilizer	2008	4,595.00	Good
<b>Other Equipments</b>			
FACIT Typewriter (Malayalam)	1995	9,735.00	Obsolete.
FACIT Typewriter (English)	1995	9429.00	Obsolete.
Stencil Duplicator	1995	13,700.00	Obsolete.
Ortem sewing machine	1995	2,300.00	Obsolete.
Computer with Printer	2003	49,750.00	Obsolete, needs to be replaced by a laptop & printer
Photostat Machine	2003	80,000.00	Bad and outdated machine, urgently requires a new machine
Brush Cutter	2009	23,726.00	Good, needs servicing

Fax Machine	2009	15,000.00	Needs servicing
Laptop Computer (DELL Studio 14 N)	2010	37,150.00	Good
Inkjet Printer (Epson TX 111 AIO)	2010	1,779.00	Good

### 1.8. Details SAC meeting conducted in 2014-15

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	10/8/2014	35	8	<ul style="list-style-type: none"> <li>Promoting organic vegetable cultivation</li> <li>Supply of quality planting materials of black pepper</li> <li>GAP in Cardamom &amp; Black pepper</li> <li>Production of good quality bio-agents</li> </ul>	<ul style="list-style-type: none"> <li>Organic farming training conducted</li> <li>Good quality rooted pepper cuttings supplied to farmers</li> <li>GAP field identified</li> <li>Bio-agents like Trichoderma, Pseudomonas, Metarhizium and EPN supplied to farmers</li> </ul>

## 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	Cardamom and Pepper based farming system in the High Ranges of the District
2	Paddy belts in specific locations
3	Homestead based farming
4	Tea plantation
5	Vegetables (Bitter gourd & Cowpea)
6	Cool season vegetables in Devikulam Block
7	Banana cropping
8	Rubber as mono-crop
9	Dairying

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

S. No	Agro-climatic Zone	Characteristics
1.	Zone-XIII	High Ranges
2.	Zone-VII	Malayoram
3.	High altitude zone – Vattavada & Kanthalloor	Climate suitable for cool season vegetables and temperate fruits

S. No	Agro ecological situation	Characteristics
1.	Agro Ecological Zone-1	Major part is mono-cropped with rubber, other areas - homestead farming is practiced with tapioca, banana and vegetables, altitude up to 500M above mean sea level, humid tropics spread over the zone. South West and North East monsoon are active and moderately distributed. South West monsoon with June maximum (South of 11° N latitude)
2.	Agro Ecological Zone-2	Major cropping pattern – Pepper, Cardamom, Coffee, Areca nut, Cocoa and Rubber intercropped, altitude 500M above mean sea level, humid tropics spread over the zone. Steep slopes
3.	Agro Ecological Zone-3	High altitude zone – Vattavada & Kanthalloor. Cool season vegetables occupy major area. Potato, temperate fruits are grown in a small scale. Zone includes the only wheat-growing tract of Kerala. North-East monsoon is prominent.

### 2.3 Soil type/s

S. No.	Soil type	Characteristics	Area in ha
1.	Manakkattu series	Clayey very deep, developed from gneissic parent material	-
2.	Cheenikuzhy series	Fine loamy texture	-
3.	Thommankuthu series	Clayey texture	-
4.	Venmani series	Clayey texture	-
5.	Marayoor series	Clay loam to clayey texture	-
6.	Pampadumpara series	Clayey texture	-

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

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Cardamom	32723	7232	250
2	Pepper	87274	30919	354
3	Banana	2665	23265	8730
4	Rice	1819	4744	2608
5	Coconut	17012	80 million nuts	5209 (Numbers/ha)
6	Tapioca	6223	240290	37883
7	Coffee	12915	8150	616
8	Tea	24648	44192	1514

**Source of Data:** - Economics and Statistics Department, Kerala State.

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

## 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2014	178.6	29.0	17.9	97.1
May 2014	24.9	28.3	19.2	96.9
June 2014	203.3	25.0	18.1	98.9
July 2014	182.2	24.7	17.8	99.0
August 2014	290.0	23.6	17.4	99.4
September 2014	148.40	25.4	17.7	98.2
October 2014	327.9	26.1	17.7	97.3
November 2014	150.8	26.6	16.6	94.8
December 2014	12.7	24.5	16.3	94.8
January 2015	5.6	23.6	13.8	95.3
February 2015	4.10	26.6	15.3	93.7
March 2015	11.2	27.6	16.5	85.6

**Source of Data:** - Indian Cardamom Research Institute, Myladumpara, Idukki.

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

Category	Population	Production	Productivity
<b>Cattle</b>			
<i>Crossbred</i>	90081	234638 ton (Milk) & 9090.87 MT (meat)	-
<i>Indigenous</i>		809 ton (milk)	-
<b>Buffalo</b>	5627	1181 ton (milk) & 7385.62 MT (meat)	-
<b>Sheep</b>			
<i>Crossbred</i>	25		-
<i>Indigenous</i>			
<b>Goats</b>	97974	5898 ton (Milk) & 692.10 MT (meat)	-
<b>Pigs</b>			
<i>Crossbred</i>	11631	3136.5 MT (Meat)	-
<i>Indigenous</i>			
<b>Rabbits</b>	39628	-	-
<b>Poultry</b>			
Hens	531501	8.64 crores (Egg)	-
<i>Desi</i>		3.38 crores (Egg)	-
<i>Improved</i>		5.25 crores (Egg) & 12019.8 MT (Meat)	-
Ducks		1.21 crores (Egg)	-
Turkey and others		-	-

Category	Area	Production	Productivity
Fish	-	-	-
Marine	-	-	-
Inland	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

**Source of Data:** - District Animal Husbandry Office, Thodupuzha, Idukki.

2.7 District profile has been **Updated** for 2014-15 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	Devikulam	Adimali	Adimali	1995 onwards	Black Pepper, Cardamom, Banana, Vegetables	Pest outbreaks	Integrated Pest Management (IPM)
2	Udumbanchola	Chinnakanal, Bison Valley, Santhanpara, Senapathy, Rajakumari, Rajakad & Nedumkandam	Chinnakanal, Bison Valley, Santhanpara, Senapathy, Rajakumari, Rajakad & Nedumkandam	1995 onwards	Cardamom, Black Pepper, Banana, Vegetables & Mushroom	1) Pest and Disease outbreaks. 2) Indiscriminate use of PP Chemicals. 3) Low yield, Indiscriminate use of chemical inputs. 4) Mastitis. 5) Animal nutrition and production management.	1) Integrated Nutrient Management. 2) Integrated Farming System. 3) Integrated Pest Management. 4) Integrated Crop Management. 5) Disease management in dairy cows. 6) Scientific management of livestock & poultry.

#### 2.9 Priority thrust areas:

S. No.	Thrust area
1.	Integrated Nutrient Management in major crops
2.	IPDM in major Plantation and Vegetable crops
3.	Integrated sustainable farming system models
4.	Organic agriculture
5.	Scientific management of livestock and poultry
6.	Scientific fertility management
7.	Improvement in reproductive efficiency in dairy cattle
8.	Feed and nutrient management in livestock
9.	Value addition of farm produce

### **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	5	37	27	16	12	155	108

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
132	102	3960	3060	50	36	250	215

Seed Production (Qtl.)				Planting materials (Nos.)			
5				6			
Target		Achievement		Target		Achievement	
				10000		6840	

Livestock, poultry strains and fingerlings (No.)				Bio-products			
7				8			
Target		Achievement		Target		Achievement	
				Trichoderma-1000 L		1163 L	
				Pseudomonas-2000 L		2271.50 L	
				EPN-25000 Nos.		49000 Nos.	
				Pheromone trap-1000 Nos.		951 Nos.	
				Detergent powder-50 kg		80 kg	
				Liquid soap-70 L		75 L	

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions											
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products		
													No.	Kg	
1	Crop improvement	Tapioca	Soil acidity leads to Zn and mg Deficiency resulting in low yield	Management practices for secondary and micronutrient disorders in tapioca	-	0	0	0	FAS-10 FV- 10	-	-	-	-	-	-
2	Crop improvement	cardamom	Unscientific nutrient management	-	Site specific nutrient management in cardamom	5	0	0	FAS-25 FV- 27 DV-15 Method demo-5	-	-	-	-	-	-
3	Crop improvement	Black Pepper	Berry shedding	-	Management of berry drop in black pepper	5	0	0	FAS-15 FV-15 DV-10	-	-	-	-	-	-
4	Crop improvement	Banana	Unscientific nutrient management	-	INM in banana cv. Nendran for high ranges	5	0	0	FAS-25 FV-10 DV-10	-	-	-	-	-	-
5	Crop improvement	Tapioca	Rodents and wild boar attack	-	Castor based herbal extract for the management of rodents and wild boar	2	0	0	FAS-35 FV-5 DV-9 Method demo-2	-	-	-	-	-	-

6	Varietal evaluation	Black Pepper	High susceptibility to foot rot disease resistance varieties only available	Assessment of suitable Black pepper foot rot (Quick wilt ) resistant variety for Idukki district	-	3	0	0	FAS-15 FV- 5	-	-	-	Pseudomonas Trichoderma VAM	-
7	IPM	Cardamom	Heavy root grub infestation	-	Popularization of EPN for control of cardamom root grub.	10	0	0	FAS-18 FV- 10	-	-	-	EPN-24000 nos.	-
8	IPM	Cardamom	Young suckers with dead heart symptoms and indiscriminate use of PPC	-	Management of shoot fly ( <i>Formosina flavipes</i> ) in small cardamom	10	0	0	FAS-8 FV- 7	-	-	-	Thiamethoxam	5
9	Integrated Crop Management	Black Pepper	High incidence of P & D in living standards of black pepper.	Use of concrete poles as standards in Black Pepper	-	0	0	0	2	-	-	-	-	-
10	Self-employment and Income generation of rural youth & women.	Mushroom	Low productivity in oyster mushrooms	Assessment of different additives in oyster mushroom bed preparation for maximizing yield	-	3	2	0	0	Spawn - 240 pkts	-	-	-	-
11	Value addition	Mushroom	Mushrooms are highly perishable	-	Packaging of mushrooms in tray packs with cling film cover	6	4	0	10	-	-	-	-	-
12	Evaluation of breeds	Poultry	Low egg production	Assessing the performance of Gramasree, Austrawhite & Sasso variety under high range conditions	-	3	0	0	2	0	0	120	-	-
13	Animal nutrition & production management	Dairy cattle	Low milk production & unawareness of mixed fodder system	-	Popularization of mixed fodder system	2	0	0	1	0	2.4 kg fodder seeds	0	-	-
14	Disease management	Dairy cattle	Incidence of mastitis	-	Prophylactic management of Mastitis in Dairy animal by using antiseptic solution in Teat cups	2	0	0	1	0	0	0	-	-
15	Nutrition management	Dairy cattle	Low milk production	-	Assessment of GRAND supplement in Cross Bred Cows	3	0	0	1	0	0	20000 nos. GRAND supplement sachet	-	-

**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	Management practices for secondary and micronutrient disorders in tapioca	KAU & TNAU	Tapioca	5	0	0	FAS- 10 FV- 10
2	Site specific nutrient management in	ICRI	Cardamom	0	10	5	FAS-25 FV- 27 DV-15 Method demo-5
3	Management of berry drop in black pepper	IISR	Black Pepper	0	10	5	FAS-15 FV-15 DV-10
4	INM in banana cv. Nendran for high ranges	KAU	Banana	0	10	5	FAS-25 FV-10 DV-10
5	Castor based herbal extract for the management of rodents and wild boar	NIPHM, Hyderabad & OFT-KVK Idukki	Tapioca	0	10	2	FAS-35 FV-5 DV-9 Method demo-2
6	Assessment of suitable Black pepper foot rot (Quick wilt) resistant variety for Idukki district	Innovation and IISR	Black pepper	5	0	3	Field visit -5 FAS-15
7	Popularization of EPN for control of cardamom root grub.	ICRI	Cardamom	0	10	2	Field visit -10 FAS-18
8	Management of shoot fly ( <i>Formosina flavipes</i> ) in small cardamom	Zonal Horticultural Research station, UAS, Dharwad.	Cardamom	0	10	2	Field visit -7 FAS-8
9	Use of concrete poles as standards in Black Pepper	KAU, IISR	Black Pepper	3	0	0	Field visits - 2
10	Assessment of different additives in oyster mushroom bed preparation for maximizing yield	KAU, TNAU	Mushroom	4	0	5	Field visits – 10 FAS – 20 Demonstrations - 5
11	Packaging of mushrooms in tray packs with cling film cover	OFT conducted at Bapooji KVK, Idukki	Mushroom	0	1	2	Field visits - 16 FAS - 16
12	Assessing the performance of Gramasree, Austrawhite & Sasso variety under high range conditions	KAU & CPDU	Poultry	10	0	3	Field visits - 2
13	Popularization of Mixed fodder System	KAU & TANUVAS	Dairy Cattle	0	10	2	Field visit - 1
14	Prophylactic management of Mastitis in Dairy animal by using antiseptic solution in Teat cups	TANUVAS	Dairy Cattle	0	10	2	Field visit - 1
15	Assessment of GRAND supplement in Cross Bred Cows	TANUVAS	Dairy Cattle	0	10	3	Field visit - 1

**3.B2 contd..**

	No. of farmers covered															
	OFT				FLD				Training				Others (Specify)			
	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	
6	5	0	0	0	0	0	0	26	0	0	0	0	0	0	0	
7	0	0	0	0	10	0	0	42	8	0	0	0	0	0	0	
8	0	0	0	0	9	1	0	34	12	0	0	0	0	0	0	
9	0	3	0	0	0	0	0	0	0	0	0	0	14	0	0	
10	4	0	0	0	0	0	0	56	67	12	8	64	21	11	6	
11	0	0	0	0	6	4	0	6	12	0	0	0	0	0	0	
12	6	4	0	0	0	0	0	15	18	0	0	0	0	0	0	
13	0	0	0	0	9	1	0	10	9	0	0	0	0	0	0	
14	0	0	0	0	7	3	0	20	12	0	0	0	0	0	0	
15	0	0	0	0	7	3	0	13	7	0	0	0	0	0	0	

### **PART IV - On Farm Trial**

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest Management										
Integrated Crop Management	-	-	-	1	-	-	-	-	-	1
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation	-	-	-	1	-	-	-	-	-	1
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>

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

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

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

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

### **4.B. Achievements on technologies Assessed and Refined**

#### **4.B.1. Technologies Assessed under various Crops**

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	Tapioca	Management practices for secondary and micronutrient disorders in tapioca	5	5	0.24
Varietal Evaluation	Black Pepper	Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District	5	5	0.08
Integrated Pest Management					
Integrated Crop Management	Black Pepper	Use of concrete poles as standards in Black Pepper	3	3	0.25
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	Mushroom	Assessment of different additives in oyster mushroom bed preparation for maximizing yield	4	4	0.05
<b>Total</b>			<b>17</b>	<b>17</b>	<b>0.62</b>

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

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	Poultry	Assessing the performance of Gramasree, Austra white & Sasso var. under High Range conditions	10	10
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
<b>Total</b>			<b>10</b>	<b>10</b>

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

#### 4. C1. Results of Technologies Assessed

##### Results of On Farm Trial

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Tapioca	Irrigated	Soil acidity leads to zinc and Boron deficiency resulting in low yield	Management practices for secondary & micronutrient disorders for Tapioca in acid soils	5	Management practices for secondary and micronutrient disorders in tapioca	1) Weight of tubers/clump (Kg) 2) Yield (t/ha) 3) BCR	-	Foliar spray was found effective for managing secondary and micronutrient disorders	-	-	-
Black Pepper	Perennial crop	High incidence of P & D in living standards of black pepper.	Use of concrete poles as standards in Black Pepper	3	Using concrete poles as standards instead of live standards	BCR	TO1 – 1.82 TO2 – 1.72	Drying of anchoring roots seen on concrete poles resulting in total loss of the crop	Adoptability restricted for small farmers as cost involved is high and end result discouraging	-	-
Mushroom	Commercial crop	Low productivity in oyster mushrooms	Assessment of different additives in oyster mushroom bed preparation for maximizing yield	4	Using different additives like urea, Bengal gram flour, groundnut cake to enhance the yield	Average yield per bed BCR	TO1 – 0.84 2.22	All other treatments failed due to repeated contamination	Repeated contamination seen on addition of different additives and so not viable	-	-

Black pepper	Perennial	High susceptibility to foot rot disease variety	Assessment of suitable Black pepper foot rot (Quick wilt) resistant variety for Idukki district	5	1) Farmers practice (Chengannoor) 2) IISR – Thevam 3) Ashwati 4) Suvarna	% reduction in quick wilt incidence & yield	<i>Ongoing till 2015-16</i>				
Poultry	Homesteads	Low egg production and poor growth performance	Assessing the performance of Gramasree, astra White and sasso variety under high range conditions	10	Assessing the performance of Gramasree, astra White and sasso variety under high range conditions	1) Egg production 2) growth rate and mortality rate	Observation for one year	Desi-71 Gramasree-169 Astra white-211 Sasso-157 Growth Rate:- Desi-0% Gramasree-9.5% Astrawhite-12.5% Sasso-9% Mortality Rate:- All-0	Highly effective and to overcome financial status	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. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (FP - No measures)	-	25	t/ha	20,000	1.25
Technology option 2 (Foliar spray of 0.5% MgSO <sub>4</sub> + 0.5% ZnSO <sub>4</sub> at 60 <sup>th</sup> and 90 <sup>th</sup> DAP)	KAU	30	t/ha	32,000	1.33
Technology option 3 (Soil application of MgSO <sub>4</sub> @ 20 kg/ha + ZnSO <sub>4</sub> @12.5 kg/ha within 2 months of planting)	TNAU	40	t/ha	28,000	1.30
Technology option 1 (FP - Live standards of Glyricidia )	-	More than 50% Glyricidia standards damaged by caterpillar	t/ha	300000	1.82
Technology option 2 (Live standards of Erythrina)	KAU	More than 30% Erythrina standards damaged by Erythrina wasp	t/ha	285000	1.72
Technology option 3 (Concrete Poles)	IISR	Concrete poles as standards	crop loss	0	0
Technology option 1 Farmers Practice (FP- Paddy Straw without additives)	KAU	Oyster mushroom – Average yield of 0.8 kg per bed in 4 harvests	kg/bed	Rs. 200/bed	2.22
Technology option 2 (TO 1 + Urea spray @ 1g/lit)	Egerton University, Kenya	Repeated contamination	kg/bed	0	0
Technology option 3 (TO 1 + Addition of Green gram flour)	TNAU, Coimbatore	Repeated contamination	kg/bed	0	0
Technology option 4 (TO 1 + Addition of groundnut cake)	Annamalai University, Chidambaram	Repeated contamination	kg/bed	0	0
Technology option 1 (FP - Chengannoor variety Black pepper)	Local	-	-	-	<i>Ongoing</i>
Technology option 2 (IISR Thevam variety Black pepper)	IISR	-	-	-	
Technology option 3 (Ashwati variety Black pepper)	Farmers developed variety from Wyanad	-	-	-	

Technology option 4 (Suvarna variety Black pepper)	Farmers developed variety from Wyanad				
Technology option 1 (FP - Rearing desi birds)		14 Eggs / month	71 nos.	215.00	1.69
Technology option 2 (Rearing Gramasree)	KAU	20 Eggs / month	169 nos.	500.00	2.25
Technology option 3 (Rearing Austrawhite)	KAU	25 Eggs / month	211 nos.	740.00	2.85
Technology option 4 (Rearing Sasso)	CPDO	10 Eggs / month	157 nos.	380.00	1.95

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

1)

- 1 Title of Technology Assessed: **Management practices for secondary and micronutrient disorders in tapioca**
- 2 Problem Definition: Soil acidity leads to Zn and mg Deficiency resulting in low yield.
- 3 Details of technologies selected for assessment:  
**Tech-1:** No measures taken (Farmers practice)  
**Tech-2:** Foliar spray of 0.5% MgSO<sub>4</sub> + 0.5% ZnSO<sub>4</sub> at 60<sup>th</sup> and 90<sup>th</sup> DAP  
**Tech-3:** Soil application of MgSO<sub>4</sub>@ 20 kg/ha + ZnSO<sub>4</sub> @12.5 kg/ha within 2 months of planting
- 4 Source of technology: KAU & TNAU.
- 5 Production system and thematic area: Nil.
- 6 Performance of the Technology with performance indicators: Nil.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Nil.
- 8 Final recommendation for micro level situation: Nil.
- 9 Constraints identified and feedback for research: Nil.
- 10 Process of farmers participation and their reaction: Nil.

2)

- 1 Title of Technology Assessed: **Use of concrete poles as standards in Black Pepper**
- 2 Problem Definition: High incidence of pest & disease in living standards of black pepper.
- 3 Details of technologies selected for assessment: Using concrete poles as standards instead of live standards.
- 4 Source of technology: IISR.
- 5 Production system and thematic area: Integrated Crop Management in perennial crop of Black Pepper.
- 6 Performance of the Technology with performance indicators: Drying of anchoring roots seen resulting in total crop loss.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Percentage of live standards affected by pests and diseases.
- 8 Final recommendation for micro level situation: Not suitable.
- 9 Constraints identified and feedback for research: Erection of poles is cumbersome and crop loss at later stage.
- 10 Process of farmers participation and their reaction: Adoptability restricted for small farmers as cost involved is high and crop loss at later stage.

3)

- 1 Title of Technology Assessed: **Assessment of different additives in oyster mushroom bed preparation for maximizing yield**
- 2 Problem Definition: Low productivity in oyster mushrooms.

- 3 Details of technologies selected for assessment: Using different additives like urea, Bengal gram flour, groundnut cake to enhance the yield.
- 4 Source of technology: Egerton University, Kenya; TNAU, Coimbatore and Annamalai University, Chidambaram.
- 5 Production system and thematic area: Self-employment and Income generation of rural youth & women.
- 6 Performance of the Technology with performance indicators: Yield per bed.
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Yield realization per bed in relation to different additives used.
- 8 Final recommendation for micro level situation: Not suitable for commercial practice.
- 9 Constraints identified and feedback for research: Repeated contamination.
- 10 Process of farmer's participation and their reaction: Not suitable for commercial practice.

4)

- 1 Title of Technology Assessed: **Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District**
- 2 Problem Definition: High susceptibility to foot rot disease of cultivated varieties.
- 3 Details of technologies selected for assessment: IISR-Thevam, Ashwathi and Suvarna variety Black Pepper.
- 4 Source of technology: IISR & Farmer developed variety.
- 5 Production system and thematic area: Pepper based cropping systems and Crop Improvement.
- 6 Performance of the Technology with performance indicators: Ongoing.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Ongoing.
- 8 Final recommendation for micro level situation: Ongoing.
- 9 Constraints identified and feedback for research: Ongoing.
- 10 Process of farmers participation and their reaction: Ongoing.

5)

- 1 Title of Technology Assessed: **Assessing the performance of Gramasree, Austrawhite and Sasso variety under high range conditions**
- 2 Problem Definition: Low egg production and poor growth performance.
- 3 Details of technologies selected for assessment: Assessing the performance of Gramasree, Austrawhite and Sasso variety under high range conditions
- 4 Source of technology: KAU & CPDO.
- 5 Production system and thematic area: Evaluation of breeds.
- 6 Performance of the Technology with performance indicators: For more egg production.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Assessing the performance of three varieties under high range conditions.
- 8 Final recommendation for micro level situation: Well adapted for high ranges and to improve financial status.
- 9 Constraints identified and feedback for research: Non-availability of chicks in time.
- 10 Process of farmers participation and their reaction: Well adapted and cooperated.

#### 4. D1. Results of Technologies Refined: Nil.

**PART V - FRONTLINE DEMONSTRATIONS****5. A. Summary of FLDs implemented during 2014-15**

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	
1	Oilseeds													
2	Pulses													
3	Cereals													
4	Millets													
5	Vegetables	Sequential cropping	Year round	Different vegetables	Local	-	Safe to eat vegetables	Ensuring nutritional security through family farming	0.4	0.12		3	3	Dearth of funds
6	Flowers													
7	Ornamental													
8	Fruit	Irrigated	Seasonal	Banana	Nendran	-	Nutrient management	INM in Nendran	1	1	0	10	10	-
		Monocrop	Summer	Banana	Nendran		Productivity improvement of major crops.	Management of lodging / breaking of banana pseudostem nearing maturity	2.0	1.0		5	5	Dearth of funds
9	Spices and condiments	Irrigated	Perennial crop	Black pepper	Karimunda	-	Crop improvement	Management of berry drop	0.2	0.2	0	10	10	-
9.a.		Irrigated	Perennial crop	Cardamom	Njallani	-	Nutrient management	Soil test based fertilizer recommendation along with organic manures	0.1	0.1	0	10	10	-
9.b.		Perennial	-	Cardamom	Njallani	-	IPM	Popularization of EPN for control of cardamom root grub.	4	4	0	10	10	-
9.c.		Perennial	-	Cardamom	Njallani	-	IPM	Management of shoot fly ( <i>Formosina flavipes</i> ) in small cardamom	1	1	0	10	10	-
10	Commercial crops													
11	Medicinal and aromatic													
12	Fodder	Homestead	Throughout the year	Mixed fodder	COFS 29 Desmanthus Agathi Subabul Anjan grass Stylo	-	Animal nutrition and production management	Popularization of mixed fodder system	0.4	0.4	0	10	10	-
13	Plantation													

14	Fibre													
15	Dairy	Homestead	Throughout the year	Dairy Cattle	Jersey	Cross bred	Disease management	Prophylactic management of mastitis in dairy animals by using antiseptic solution in teat cups	10	10	0	10	10	-
		Homestead	Throughout the year	Dairy Cattle	Jersey and HF	Cross bred	Nutrition Management	Assessment of GRAND supplement in cross bred cows	10	10	0	10	10	-
16	Poultry													
17	Rabbitry													
18	Piggery													
19	Sheep and goat													
20	Duckery													
21	Common carps													
22	Mussels													
23	Ornamental fishes													
24	Oyster mushroom	Monocrop	-	Mushroom	Florida	-	Value addition	Packaging of mushrooms in tray packs with cling film cover	10 units	10 units	0	10	10	-
		Monocrop	Year round	Mushroom	Florida		Productivity improvement of major crops.	Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production	10 units	0	0	0	0	Dearth of funds
25	Button mushroom													
26	Vermicompost													
27	Sericulture													
28	Apiculture													
29	Implements													
30	Others (Tapioca)	Rainfed	seasonal	Tapioca	Local		Crop improvement	Use of castor based herbal extract	1	1	0	10	10	-
	Others (specify)													

### Specialized EDP mode on production and value addition with marketing and branding

Specialised EDP mode training on processing given for 5 selected members at Bapooji KVK. Group promotional activities and packaging aspects given for this group in May-2014. Labeling aspects given for Asparagus pickle (Kairali SHG), coconut chutney powder (Star SHG), curry powders (Gokul activity group), mushroom products (Aishwarya mushrooms). The unit members participated in the exhibitions on November and December - 2014 with their value added products.

#### 5. A. 1. Soil fertility status of FLDs plots during 2014-15

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1	Oilseeds												
2	Pulses												
3	Cereals												
4	Millets												
5	Vegetables	Sequential cropping	Year round	Different vegetables	Local	-	Safe to eat vegetables	Ensuring nutritional security through family farming	Year round	M	M	M	Bitter gourd
6	Flowers												
7	Ornamental												
8	Fruit	Irrigated	Kharif	Banana	Nendran		Crop improvement	INM in nendran	-	H	H	M	-
		Monocrop	Summer	Banana	Nendran		Productivity improvement of major crops.	Management of lodging / breaking of banana pseudostem nearing maturity	Summer	M	M	M	Banana
9	Spices and condiments	Irrigated	Perrinaial	Cardamom	Njallani		Crop improvement	Soil test based fertilizer recommendation	-	H	M	L	-
		Irrigated	Perrinaial	Pepper	Karimunda		Crop improvement	Management of berry drop	-	H	M	L	-
		Cardamom based cropping system	Perennial	Cardamom	Njallani	-	IPM	Popularization of EPN for control of cardamom root grub	-	H	H	L	Cardamom
		Cardamom based cropping system	Perennial	Cardamom	Njallani	-	IPM	Management of shoot fly ( <i>Formosina flavipes</i> ) in small cardamom	-	H	H	L	Cardamom
10	Commercial crops												
	Medicinal and aromatic												
	Fodder												
	Plantation												
	Fibre												
	Mushroom	Monocrop	Year round	Mushroom	Florida	-	Productivity improvement of major crops.	Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production	Year round	-	-	-	Not done

## 5. B. Results of Frontline Demonstrations

## 5. B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds																			
Pulses																			
Cereals																			
Millets																			
Vegetables	Ensuring nutritional security through family farming	Local	-	Sequential cropping	3	0.12	5.17	4.08	4.63	0	100	4167	12017	7850	2.88	Not practiced			NA
Flowers																			
Ornamental																			
Fruit	INM in Nendran	Nendran	-	Irrigated	10	1	301.4	275.6	288.5	227.3	26.92	200000	380000	180000	1.9	210000	300000	90000	1.42
	Management of lodging / breaking of banana pseudostem nearing maturity	Nendran	-	Monocrop	5	1.0	300	292	296	185	60	151000	302095	151095	2.0	144050	168300	24250	1.17
Spices and condiments	Soil test based fertilizer recommendation along with organic manure	Njallani	-	Irrigated	10	0.1	9.8	10.0	9.9	8.0	25.0	70000	250000	180000	3.5	75000	150000	75000	2.0
	Management of berry drop	Karimunda	-	Irrigated	10	0.2	2.6	2.5	2.6	2.1	23.81	103000	365000	354700	3.5	105000	265000	160000	2.5
	Popularization of EPN for control of cardamom root grub	Njallani	-	Perennial	10	4	-	-	H	-	48	205000	597500	392500	2.9	181000	382800	201800	2.11
	Management of shoot fly ( <i>Formosina flavipes</i> ) in small cardamom	Njallani	-	Perennial	10	1	-	-	H	-	63	280000	753600	473600	2.6	218000	414200	196200	1.90
Commercial																			
Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder																			
Plantation																			
Fibre																			
Others (Mushroom)	Packaging of mushrooms in tray packs with cling film cover	Florida	-	-	0	0	0	0	0	0	0	23808	47413	23605	1.99	11970	18400	6430	1.53

	Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production	Florida		Monocrop	0	0						Not done							
Others (Tapioca)	Use of castor based herbal extract for control of rodents and wild boar	local	-	Rainfed	10	1	1.87	1.25	1.56	0.9	25	12500	15000	2500	1.2	14000	12000	2000	0.85
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.) : Nil.**

### 5. B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)			% Increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./unit)				
					Demo				Check if any	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy	Popularization of Mixed Fodder System	Cross bred Cows	10	10	13	18	14	13	15	13610	30420	16810	2.23	14600	23940	9340	1.63
	Prophylactic Management of Mastitis in dairy cows by using antiseptic solution in teat cups	Jersey and HF	10	10	13	17	14	12	15	14800	24120	9320	1.62	14260	20520	6260	1.43
	Assessment of GRAND supplement in cross bred cows	Jersey Cross	10	10	12	18	14	13	20	14520	27720	13200	1.90	13520	22500	8980	1.66
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

\*\* BCR= GROSS RETURN/GROSS COST

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

**5. B.3. Fisheries: Nil.**

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

**5. B.5. Farm implements and machinery: Nil.**

**5. B.6. Extension and Training activities under FLD**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	3	25	-
2	Farmers Training	2	32	-
3	Media coverage			-
4	Training for extension functionaries			-
5	Others (Field visit)	25	40	-
6	Others (Demonstration)	2	20	-
7	Others (Fest, Carnival)			-
8	Others (FAS)	5	5	-
9	Others (Please specify)	-	-	-

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS: Nil.****PART VII. TRAINING****7.A.. Training of Farmers and Farm Women 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
<b>Crop Production</b>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Others (Organic farming in vegetable)	1	11	31	42	0	0	0	11	31	42
Others (IPDM in Banana)	2	62	4	66	0	0	0	62	4	66
Others (IPDM in vegetable)	1	80	19	99	14	20	34	94	39	133
<b>Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

Others (Specify)										
<b>b) Fruits</b>										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques	1	26	4	30	0	0	0	26	4	30
Others (pl.specify)										
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
<b>Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										

Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
<b>Livestock Production and Management</b>										
Dairy Management	3	30	3	33	0	0	0	30	3	33
Poultry Management	2	27	0	27	0	0	0	27	0	27
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
<b>Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	3	8	35	43	0	0	0	8	35	43
Women empowerment										
Location specific drudgery production										
Rural Crafts	4	0	55	55	0	0	0	0	55	55
Women and child care										
Others (pl.specify)										
Others (Processing and Packaging of Mushroom)	1	6	4	10	0	0	0	6	4	10
<b>Agril. Engineering</b>										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
<b>Plant Protection</b>										
Integrated Pest Management										
Integrated Disease Management	2	130	29	159	0	0	0	130	29	159
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										

Others (pl.specify)										
<b>Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
<b>Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	4	49	41	90	4	1	5	53	42	95
Apiculture										
Others (pl.specify)										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										

Others (Pl. specify)										
<b>TOTAL</b>	<b>24</b>	<b>429</b>	<b>194</b>	<b>612</b>	<b>18</b>	<b>21</b>	<b>39</b>	<b>436</b>	<b>215</b>	<b>651</b>

### 7.B Training of Farmers and Farm Women 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
<b>Crop Production</b>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	1	30	0	30	0	0	0	30	0	30
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
<b>Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (Specify)										
Others(Organic vegetable cultivation )	5	211	89	300	30	10	40	241	99	340
Others (ICM in Vegetables)	2	107	46	153	0	0	0	107	46	153
Others(IPDM in Vegetables)	7	165	159	324	0	16	16	165	175	340
Others(IPDM in Cool Season Vegetables)	1	20	5	25	0	0	0	20	5	25
<b>b) Fruits</b>										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										

Plant propagation techniques										
Others (pl.specify)										
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
<b>Soil Health and Fertility Management</b>										
Soil fertility management	5	140	101	241	0	0	0	140	101	241
Integrated water management										
Integrated nutrient management	2	117	25	142	0	0	0	117	25	142
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	1	12	3	15	0	0	0	12	3	15
Nutrient use efficiency	1	150	50	200	0	0	0	150	50	200
Balanced use of fertilizers										
Soil and water testing	1	32	5	37	0	0	0	32	5	37
Others (pl.specify)										
Others (Soil Conservation)	1	120	65	185	0	0	0	120	65	185
<b>Livestock Production and Management</b>										
Dairy Management	3	174	129	303	0	0	0	174	129	303
Poultry Management	3	38	72	110	0	0	0	38	72	110
Piggery Management										
Rabbit Management										

Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Others (Goat Management)	3	80	85	165	0	0	0	80	85	165
<b>Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	1	0	17	17	0	0	0	0	17	17
Value addition	3	10	60	70	3	6	9	13	66	79
Women empowerment										
Location specific drudgery production										
Rural Crafts	2	0	26	26	0	10	10	0	36	36
Women and child care										
Others (pl.specify)										
Others (Processing & popularization of Jack fruit)	6	0	1147	1147	0	0	0	0	1147	1147
<b>Agril. Engineering</b>										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
<b>Plant Protection</b>										
Integrated Pest Management										
Integrated Disease Management	8	232	93	325	40	12	52	272	105	377
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Others (ICM in Black Pepper)	1	43	32	75	0	0	0	43	32	75
<b>Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										

Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
<b>Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	1	94	163	257	0	0	0	94	163	257
Apiculture	2	45	0	45	45	0	45	90	0	90
Others (pl.specify)										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>59</b>	<b>1790</b>	<b>2372</b>	<b>4162</b>	<b>118</b>	<b>54</b>	<b>172</b>	<b>1938</b>	<b>2426</b>	<b>4364</b>

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

Krishi Vigyan Kendra, Idukki

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										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	3	0	15	15	0	0	0	0	15	15
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
<b>TOTAL</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>15</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	8	7	15	0	0	0	8	7	15
Small scale processing										
Post Harvest Technology	1	2	28	30	0	0	0	2	28	30
Tailoring and Stitching										
Rural Crafts	7	0	127	127	0	192	192	0	319	319
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
Any other (Commercial vegetable cultivation and marketing)	1	32	17	49	0	0	0	32	17	49
<b>TOTAL</b>	<b>10</b>	<b>42</b>	<b>179</b>	<b>221</b>	<b>0</b>	<b>192</b>	<b>192</b>	<b>42</b>	<b>371</b>	<b>413</b>

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

**7.F. Training programmes for Extension Personnel including sponsored training programmes (off campus): Nil.****7.G. Sponsored training programmes conducted**

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>1</b>	<b>Crop production and management</b>										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables										
1.c.	Integrated Pest and Disease Management	1	25	10	35	0	0	0	25	10	35
<b>2</b>	<b>Production and value addition</b>										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
<b>3.</b>	<b>Soil health and fertility management</b>										
<b>4</b>	<b>Production of Inputs at site</b>										
<b>5</b>	<b>Methods of protective cultivation</b>										
<b>6</b>	<b>Others (Banana cultivation)</b>										
<b>7</b>	<b>Post harvest technology and value addition</b>										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
<b>8</b>	<b>Farm machinery</b>										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
<b>9.</b>	<b>Livestock and fisheries</b>										
<b>10</b>	<b>Livestock production and management</b>										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c.	Fisheries Nutrition										
10.d.	Fisheries Management										
10.e.	Others (pl.specify)										
<b>11.</b>	<b>Home Science</b>										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
<b>12</b>	<b>Agricultural Extension</b>										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	<b>Total</b>	<b>1</b>	<b>25</b>	<b>10</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>10</b>	<b>35</b>

**Details of sponsoring agencies involved**

1. Coffee Board
2. Dept. of Agriculture
3. ATMA
4. District Industries Centre (DIC), Idukki
5. Kudumbasree, Idukki
6. NSS College, Rajakumary
7. GVHSS, Rajakumary
8. MBVHSS, Senapathy
9. NHRDF
10. RAWE

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

S. No.	Area of training	No. of Courses	No. of Participants									
			General			SC/ST			Grand Total			
			Male	Female	Total	Male	Female	Total	Male	Female	Total	
<b>1</b>	<b>Crop production and management</b>											
1.a.	Commercial floriculture											
1.b.	Commercial fruit production											
1.c.	Commercial vegetable production											
1.d.	Integrated crop management											
1.e.	Organic farming											
1.f.	Others (Nutrient Management in Different Crops)	1	0	9	9	0	0	0	0	9	9	
1.g.	Others (RAWA)	1	0	9	9	0	0	0	0	9	9	
1.h.	Others (O J T)	2	44	30	74	0	0	0	44	30	74	
<b>2</b>	<b>Post harvest technology and value addition</b>											
2.a.	Value addition											
2.b.	Others (pl.specify)											
<b>3.</b>	<b>Livestock and fisheries</b>											
3.a.	Dairy farming											
3.b.	Composite fish culture											
3.c.	Sheep and goat rearing											
3.d.	Piggery											
3.e.	Poultry farming											
3.f.	Others (pl.specify)											
<b>4.</b>	<b>Income generation activities</b>											
4.a.	Vermi-composting											
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.											
4.c.	Repair and maintenance of farm machinery and implements											
4.d.	Rural Crafts	2	0	11	11	0	105	105	0	116	116	
4.e.	Seed production											
4.f.	Sericulture											
4.g.	Mushroom cultivation											
4.h.	Nursery, grafting etc.											
4.i.	Tailoring, stitching, embroidery, dying etc.											
4.j.	Agril. para-workers, para-vet training											
4.k.	Others (pl.specify)											
<b>5</b>	<b>Agricultural Extension</b>											
5.a.	Capacity building and group dynamics											
5.b.	Others (pl.specify)											
	<b>Grand Total</b>	<b>6</b>	<b>44</b>	<b>59</b>	<b>103</b>	<b>0</b>	<b>105</b>	<b>105</b>	<b>44</b>	<b>164</b>	<b>208</b>	

### PART VIII – EXTENSION ACTIVITIES

#### Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	3	19	1	20	0	0	0	0	0	0
Kisan Mela	0	0	0	0	0	0	0	0	0	0
Kisan Ghosthi	0	0	0	0	0	0	0	0	0	0
Exhibition	1	402	270	672	111	92	203	56	64	120
Film Show	0	0	0	0	0	0	0	0	0	0
Method Demonstrations	5	25	2	27	0	0	0	0	0	0
Farmers Seminar	0	0	0	0	0	0	0	0	0	0
Workshop (Network workshop of KVKs)	1	0	0	0	0	0	0	4	2	6
Group meetings	0	0	0	0	0	0	0	0	0	0
Lectures delivered as resource persons	0	0	0	0	0	0	0	0	0	0
Newspaper coverage	9	-	-	-	-	-	-	-	-	-
Radio talks	3	-	-	-	-	-	-	-	-	-
TV talks	0	0	0	0	0	0	0	0	0	0
Popular articles	0	0	0	0	0	0	0	0	0	0
Extension Literature	4	-	-	-	-	-	-	-	-	-
Advisory Services	254	202	67	269	0	0	0	5	3	8
Scientific visit to farmers field	37	108	11	119	0	0	0	0	0	0
Farmers visit to KVK	269	1003	335	1338	0	0	0	2	3	5
Diagnostic visits	46	48	1	49	0	0	0	1	2	3
Exposure visits	1	0	9	9	0	0	0	0	0	0
Ex-trainees Sammelan	1	0	12	12	0	0	0	0	0	0

Soil health Camp	0	0	0	0	0	0	0	0	0	0
Animal Health Camp	0	0	0	0	0	0	0	0	0	0
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	0	0	0	0	0	0	0	0	0	0
Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	0	0	0	0	0	0	0	0	0	0
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0
Celebration of important days (World environment day)	1	0	0	0	0	0	0	0	0	0
Celebration of important days (World food day)	1	90	98	188	0	0	0	9	4	13
Any Other (Technology week celebration)	5	549	180	729	0	0	0	30	16	46
Any Other (PPV & FRA)	1	178	10	188	0	0	0	0	0	0
Any Other (FFS - IPDM in Cardamom)	1	0	29	29	0	0	0	0	4	4
Any Other (FFS in cowpea)	1	25	0	25	0	0	0	0	0	0
Any Other (Swachh bharath)	1	-	-	-	-	-	-	-	-	-
Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>641</b>	<b>2649</b>	<b>1025</b>	<b>3674</b>	<b>111</b>	<b>92</b>	<b>203</b>	<b>107</b>	<b>98</b>	<b>205</b>

## **PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS**

**9.A. Production of seeds by the KVKs: Nil.**

**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	Black pepper	Panniyoor-1	-	884	8840	79
		Panniyoor-4	-	120	1440	46
		Panniyoor-5	-	331	3972	50
		Panniyoor-7	-	756	9072	76
		Chengannoor	-	1965	19650	115
		Karimunda	-	940	9400	39
		Kottanadan	-	259	2590	27
		Malabar excel	-	166	1992	45
		Pournami	-	20	240	1
		IISR Shakthi	-	416	4992	41
		IISR Thevam	-	40	480	16
		Sreekara	-	12	144	1
		Subhakara	-	134	1608	6
		Thekken	-	176	2112	5
		Grimunda	-	651	7812	42
		Arimunda	-	20	240	1
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
<b>Total</b>				<b>16789</b>	<b>74584</b>	<b>886</b>

**9.C. Production of Bio-Products**

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide	EPN	49000 nos.	49000.00	548
	Pheromone trap	951 nos.	175935.00	896
	Metarhizium	4 litres	400.00	4
Bio-fungicide	Pseudomonas	2271.50 litres	227150.00	712
	Trichoderma	1163 litres	116300.00	286
Bio Agents	Mushroom spawn	1418.25 kg	170190.00	158
Others (Homecare product)	Detergent powder	80 kg	4000.00	85
Others (Homecare product)	Liquid soap	75 L	1875.00	65
Others (specify)				
<b>Total</b>			<b>7,44,850.00</b>	<b>2754</b>

#### 9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
<b>Dairy animals</b>				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
<b>Poultry</b>				
Broilers				
Layers	Austrawhite & Gramasree	9	1575	5
Duals (broiler and layer)				
Japanese Quail				
Turkey	Broad Breasted Large White	32	6275	18
Emu				
Ducks				
Others (Pl. specify)				
<b>Piggery</b>				
Piglet				
Others (Pl. specify)				
<b>Fisheries</b>				
Fingerlings				
Others (Pl. specify)				
<b>Total</b>		<b>41</b>	<b>7850</b>	<b>23</b>

### 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.)  
Six month Interval & 1000 copies distributed

- (B) Literature developed/published

Item	Title	Authors name	Number
Research papers	-	-	-
Technical reports	-	-	-
News letters	-	-	1000
Technical bulletins	ICM in strawberry	Mr. Sudhakar Soundarajan	1000
	Calendar Operations for Cardamom	Mr. Sudhakar Soundarajan	2000
Popular articles	-	-	-
Extension literature	Oyster Mushroom Cultivation	Dr. Benjamin Mathew & Dr. Binu John Sam	200
	Strawberry Cultivation	Dr. Benjamin Mathew	200
	Pest and Disease Management of Strawberry	Dr. Benjamin Mathew	200
	Health and Food Security through Nutritious Food	Ms. Jayisy Joseph	200
Others (Pl. specify)	-	-	-
<b>TOTAL</b>			<b>4800</b>

**10.B. Details of Electronic Media Produced : Nil.**

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

**1. Title of the success stories : *Skill development enterprise for Rural youth***

**Details of success stories :**

### ***1. Background***

A group of 55 tribal school drop-outs is an example how rural youth can effectively utilize their talents, which would help to lead towards personality development and to reduce poverty. The objective of this group is to mainstream scheduled tribes girl children who have been pushed out. With this objective, the academic orientation is not sufficient and it was realized that vocational and life –skill based training is essential. Following this, in collaboration with KVK Rural craft section, we are engaged in vocational skill development training as well as supportive education for the children in adivasi colonies. To livelihood and starvation issues in these colonies are severe. Hence, the plan is to train adivasi girl children and start a production unit for fabric designing and Jewellery making.

### ***2. Intervention process***

- To assess their educational needs and to provide essential training.
- To enhance their life-skills by extending life-skill education.
- Skill development vocational training .
- Motivation to start an enterprise.
- Technical guidance for starting the unit.
- Details about availability of raw materials.
- Advisory services.
- Follow-up visit.
- Technical back up in running the unit as when required.

### ***3. Intervention Technology***

- To create an environment where women can seek knowledge and information and there by empower them to play positive role in their own development and development of society .
- To enhance the self-image and self- confidence of women and thereby enabling them to recognize their contribution to the economy as producers and workers, reinforcing their need for participating in educational programmes.
- To provide women and adolescent girls with the necessary support structures and an informal learning environment to create opportunities for education.

### ***4. Impact Horizontal Spread***

This enterprise aimed at empowering 100 rural youth in tribal areas of Idukki district by providing skill development training to make them self-sufficiency and self-reliant. This enterprise will enable women deprived, poverty stricken, working as domestic servants, single parent and widows are being given opportunity to undergo free training and in turn they earn and live on their own. The entire family will be benefited, will support the beneficiary to establish small scale units.

### **5. Impact Economic Gains**

They earn an average Income per month is Rs.10000/-

### **6. Impact on Employment Generation**

This programme will empower women for their families well being and for their sustainable living, every batch of women / youth- girls will in turn benefit by this programme and will take this as their profession and train other women community and develop their standard of living. Self-employment is the main source of income. So they are engaged more in self- employed manufacturing and trade activities compared to others.

## **2. Title of the success stories : *Skill development enterprise for Rural youth***

### **Details of success stories :**

#### ***1. Background***

**Mrs. Prathibha**, Pulickal, Pethotty, in Idukki district, is a +2 passed unemployed lady is an example how woman can effectively utilize their talents and leisure time for income generation .She has attended 6 months long vocational training on different topics such as Fabric designing, Jewellery Making, Toys Making, Quilling Art and Home care product preparations in our KVK under Rural Craft discipline. The topics that impressed her was the Fabric designing, Jewellery making, and soft toys making . Motivated from the training , she started a designing unit and learn to make jewellery, fabric designing and soft toys making to meet the modern trends of marketing. She has taken bulk orders from fancy stores, textiles and local markets. She has purchased the required raw materials in bulk and has employed a woman to work along with her .she does the main and finishing touches to herself and the rest of the work is done by the woman working with her .she purchases the raw materials in bulk at a cheaper rate and the work place is her-own house. Therefore, the profit she gains is comparatively higher.

#### ***2. Intervention process***

- 6 months vocational training.
- Motivation to start an enterprise.
- Technical guidance for starting the unit.
- Details about availability of raw materials given.
- Advisory services.
- Follow- up visits.
- Technical back up in running the unit as when required.

#### ***3. Intervention Technology***

To provide skill development vocational training to make her self-sufficient and self-reliant.

#### ***4. Impact Horizontal Spread***

This enterprise will provide skill development for the women dwellers in identified area , families will be benefited directly and creating a ray of hope for better source of livelihood , and live a sustainable life with self-sufficiency and self-reliance.

### **5. Impact Economic Gains**

She earn an average profit per month is Rs. 15000/-

### **6. Impact on Employment Generation**

Motivated from the above mentioned Mrs. Prathibha's successful enterprise, around 10 rural women are going to start fabric designing and jewellery making on a commercial basis. In addition to this unit, they are planning to start a small fancy store with loan availing from nearby Co-operative bank for self-sufficiency and self employment. Also they generate employment opportunities for others.

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

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

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

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

**10.G. Field activities**

- i. Number of villages adopted : 13
- ii. No. of farm families selected : 177
- iii. No. of survey/PRA conducted : 1

**10.H. Activities of Soil and Water Testing Laboratory**

Status of establishment of Lab : Functioning.

1. Year of establishment : 2005-06

2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1.	LPG Cylinder	1	4600.00
2.	Water bath WDB-2 350'400'100mm 12 holes	1	4815.00
3.	Machinery for Homogenising (khan shaker) Model LKS2 platform size 75cmx43cmx10cm	1	20,880.00
4.	Rotary Shaker	1	16,200.00
5.	Machinery for drying (Hot air oven) with digital temperature control, size 455'455'455'	1	13,725.00
6.	Conductivity meter (PH meter Eutech 510)	1	21,935.00
7.	Genesis 20 visible Spectrophotometer meter	1	1,12,499.00
8.	CITIZEN Physical Balance Model CTL-600	1	8,991.00
9.	Micro processor based conductivity	1	13,500.00
10.	Micro Processor Based Flame Photometer with N, K & Ca FILTERS & Compressor	1	45,000.00
11.	Electronic Automatic KEL PLUS Micro processor Based Twelve Place Micro Block Digestion System	1	97,043.00
12.	Electronic Balance Model: CP 2245 Srl.No.18606016	1	1,00,000.00
13.	Hot plate	1	5,400.00
<b>Total</b>		<b>12</b>	<b>4,64,588.00</b>

**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.)
<b>Soil Samples</b>	1685	1007	109	84250.00
<b>Water Samples</b>	17	15	13	850.00
<b>Plant samples</b>	0	0	0	0.00
<b>Manure samples</b>	4	3	1	200.00
<b>Others (soil test campaign)</b>	300	300	3	90000.00
<b>Total</b>	<b>2006</b>	<b>1325</b>	<b>126</b>	<b>1,75,300.00</b>

**Details of samples analyzed during the 2014-15 :**

Details	No. of Samples analyzed	No. of Farmers	No. of Villages	Amount realized (Rs.)
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		<b>benefited</b>		
<b>Soil Samples</b>	411	274	86	20550.00
<b>Water Samples</b>	1	1	1	50.00
<b>Plant samples</b>	0	0	0	0.00
<b>Manure samples</b>	0	0	0	0.00
<b>Others (specify)</b>	0	0	0	0.00
<b>Total</b>	<b>412</b>	<b>275</b>	<b>87</b>	<b>20,600.00</b>

### 10.I. Technology Week celebration during 2014-15 Yes/No, If Yes

Period of observing Technology Week : 24/11/2014 to 28/11/2014  
 Total number of farmers visited : 783  
 Total number of agencies involved : 8  
 Number of demonstrations visited by the farmers within KVK campus : 11

#### Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized	15	615	
Exhibition	11	783	
Film show			
Fair			
Farm Visit	4	610	Pepper, Cardamom, Vegetables, Ornamental plants
Diagnostic Practical's			
Supply of Literature (No.)	800		
Supply of Seed (q)			
Supply of Planting materials (No.)	150	35	Black pepper
Bio Product supply (Kg)	372	310	Cardamom, Black pepper & Vegetables
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week		783	

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

A. Introduction of alternate crops/varieties: Nil.

B. Major area coverage under alternate crops/varieties: Nil.

C. Farmers-scientists interaction on livestock management: Nil.

State	Livestock components	Number of interactions	No. of participants
<b>Total</b>			

D. Animal health camps organized : Nil.

E. Seed distribution in drought hit states: Nil.

F. Large scale adoption of resource conservation technologies: Nil.

G. Awareness campaign: Nil.

## **PART XI. IMPACT**

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Ecodon for rodents & Wild boar bio control	25	90	13500	24000
IIHR BANANA SPECIAL	35	65	5,000	7,500
EPN	200	50	4,500	22,500
Bio-management of Banana Pseudostem weevil	50	80	1,200/ha	3,100

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

**11.B. Cases of large scale adoption: Nil.****11.C. Details of impact analysis of KVK activities carried out during the reporting period: Nil.****PART XII - LINKAGES****12.A. Functional linkage with different organizations**

Name of organization	Nature of linkage
ATMA	Demonstration and Trainings
State Planning Board	Demonstration and Scouting and documentation of farm innovations

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 Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies**

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
Development of pest surveillance and crop advisory project in Idukki District.	Created awareness and advised to the farmers to keep the pest situation below ETL level.	10/05/2014	Kerala State Planning Board	6,00,000.00

**12.C. Details of linkage with ATMA**

a) Is ATMA implemented in your district: **Yes**

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

We are actively participated in the final formulation of SREP preparation of the Idukki District. We discussed the technologies that can take up in ATMA demonstrations. We also explained the areas which can cover under various trainings programmes.

**Coordination activities between KVK and ATMA during 2014-15**

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	Monthly Technology Advisory	10	2	-
02	Research projects				
03	Training programmes	Various trainings	32	-	-
04	Demonstrations				
05	Extension Programmes				

	Kisan Mela				
	Technology Week	1	5	1	
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
<b>06</b>	<b>Publications</b>				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
<b>07</b>	<b>Other Activities</b> (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

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

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

**12.F. Details of linkage with RKVY: Nil.**

**12.G. Kisan Mobile Advisory Services: Nil.**

### **PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK**

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Mushroom production unit	2010	50 m <sup>2</sup>	Oyster mushroom Var. Florida	Mushroom	0.347 q	4337.00	8675.00	Revolving Fund
2.	Mushroom Spawn production unit	2009	10 m <sup>2</sup>	Oyster mushroom Var. CO2 & Florida	Spawn	5673 packets	85095.00	170190.00	Funded by SHM
3.	Mist Chamber	2009	96 m <sup>2</sup>	Panniyoor-1, 4, 5, 6 & 7 Sreekara Subhakara Panchami IISR Thevam IISR Shakthi Excel Kottanadan Karimunda Chengannoor Thekken Girimunda Arimundi	Pepper vines	6890 rooted cuttings	20670.00	74584.00	Funded by SHM
4.	Rain Shelter	2009	50 m <sup>2</sup>	-	-	-	-	-	Funded by SHM (Infrastruc

									ture damaged by heavy wind & rain and needs major repair)
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**13.B. Performance of instructional farm (Crops) including seed production: Nil.**

**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.	Pseudomonas	2271.50 litres	90860.00	1,36,290.00	-
2.	Trichoderma	1163 litres	58150.00	58150.00	-
3.	EPN	49000 nos.	5000.00	49000.00	-
4.	Metarhizium	4 litres	100.00	400.00	-
5.	Pheromone trap	951 nos.	66570.00	109365.00	-

**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	Poultry	Gramasree, Austrawhite & Sasso variety	Egg	20 / bird / month	310	420	These varieties are well adapted in high ranges

**13.E. Utilization of hostel facilities: NA.**

**13.F. Database management**

S. No	Database target	Database created
1.	Farmers database	Database for 2013-14 & 2014-15.

**13.G. Details on Rain Water Harvesting Structure and micro-irrigation system: Nil.**

**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
Revolving Fund Account	State Bank of Travancore	Rajakumary	70453	Bapooji Krishi Vigyan Kendra (Rev Fund)	67155078042	685009806	SBTR0000453
Main Grant Account	State Bank of Travancore	Rajakumary	70453	Bapooji Sevak Samaj Krishi Vigyan Kendra	57060836995	685009806	SBTR0000453

**14.B. Utilization of KVK funds during the year 2014-15 (Rs. in lakh)**

S. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	<b>Pay &amp; Allowances</b>	83.10	83.10	83.13436
2	<b>Traveling allowances</b>	1.30	1.30	1.31373
3	<b>Contingencies</b>			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	0.55	0.55	1.73409
B	POL, repair of vehicles, tractor and equipments	0.55	0.55	1.84311
C	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	0.20	0.20	0.29492
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.20	0.20	0.46351
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.70	1.70	1.74242
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.30	0.30	0.42486
G	Training of extension functionaries	0.10	0.10	0.10000
H	Maintenance of buildings	0.10	0.10	0.10146
I	Establishment of Soil, Plant & Water Testing Laboratory	0.00	0.00	0.00
J	Library	0.00	0.00	0.00
K	Extension Activities	0.10	0.10	0.42385
L	Farmers Field School	0.10	0.10	0.01000
M	Integrated Farming System (IFS)	0.10	0.10	0.10330
<b>TOTAL (A)</b>		<b>88.40</b>	<b>88.40</b>	<b>91.68961</b>
<b>B. Non-Recurring Contingencies</b>				
1	<b>Works</b>	0.00	0.00	0.00
2	<b>Equipments including SWTL &amp; Furniture</b>	0.00	0.00	0.00
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	0.00	0.00	0.00
4	<b>Library</b> (Purchase of assets like books & journals)	0.00	0.00	0.00
<b>TOTAL (B)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>C. REVOLVING FUND</b>		<b>0.00</b>	<b>0.00</b>	<b>19.87199</b>
<b>GRAND TOTAL (A+B+C)</b>		<b>88.40</b>	<b>88.40</b>	<b>111.56160</b>

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2012 to March 2013	4.11341	15.40938	12.65084	6.87195
April 2013 to March 2014	6.87195	12.5319	15.51956	3.88429
April 2014 to March 2015	3.88429	16.42118	19.72403	0.58144

**15. Details of HRD activities attended by KVK staff during 2014-15**

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. S. Jayababu	Subject Matter Specialist (Animal Husbandry)	Participatory Impact Monitoring and Assessment	MANAGE, Hyderabad	30/11/2014 to 07/12/2014
Jayisy Joseph	Programme Assistant (Home Science)	Frontier Home Science Technology for Knowledge and economic empowerment	UAS, Dharwad	28/10/2014 to 30/10/2014
Dr. Binu John Sam	Subject Matter Specialist (Horticulture) & Programme Coordinator i/c.	Advances in Production of Quality Planting Materials in Plantation Crops	ICAR - CPCRI, Kayamkulam	18/11/2014 to 27/11/2014
		Tropical and Exotic Fruit Production	CARD KVK, Pathanamthitta	07/08/2014 to 08/08/2014
		Technology Management in Agriculture	NAARM, Hyderabad	09/06/2014 to 11/06/2014
		Network Workshop of KVKs in Kerala State on Family Farming	Kerala Agricultural University	26/05/2014 to 28/05/2014
Mr. Sudhakar Soundarajan	Subject Matter Specialist (Plant Protection)	IPM in important crops of southern India with special reference to Karnataka, Kerala, Goa and Tamil Nadu	NCIPM-New Delhi & ZPD – Zone VIII, Bengaluru	23/07/2014 to 25/07/2014
Ms. Manju Jincy Varghese	Subject Matter Specialist (Soil Science)	Integrated Farming System	Kerala Agricultural University	28/10/2014 to 29/10/2014
Dr. Benjamin Mathew	Subject Matter Specialist (Agri. Extension)	Protected cultivation	UAS, Dharwad	04/12/2014 to 24/12/2014
		Tropical and Exotic Fruit Production	CARD KVK, Pathanamthitta	07/08/2014 to 08/08/2014

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

# SUMMARY FOR 2014-15

## I. TECHNOLOGY ASSESSMENT

### Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Tapioca	Management practices for secondary and micronutrient disorders in tapioca	5
Varietal Evaluation	Black Pepper	Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District	5
Integrated Pest Management			
Integrated Crop Management	Black Pepper	Use of concrete poles as standards in Black Pepper	3
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	Mushroom	Assessment of different additives in oyster mushroom bed preparation for maximizing yield	4
<b>Total</b>			<b>17</b>

### Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management	Poultry	Assessing the performance of Gramasree, Austrawhite and Sasso Variety under high range conditions	10
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)			
<b>Total</b>			<b>10</b>

Summary of technologies assessed under various enterprises: Nil.

Summary of technologies assessed under home science: Nil.

**II. TECHNOLOGY REFINEMENT: Nil.****III. FRONTLINE DEMONSTRATION****Crops**

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals																		
Millets																		
Oilseeds																		
Pulses																		
Vegetables	Safe to eat vegetables	Ensuring nutritional security through family farming	1	3	0.12	4.63	0	100	0	0	4167	12017	7850	2.88	Not practiced			NA
Flowers																		
Ornamental																		
Fruit	INM	INM in Nendran	1	10	1	288.5	227.3	26.92	0	0	200000	380000	180000	1.9	210000	300000	90000	1.42
	Productivity improvement of major crops.	Management of lodging / breaking of banana pseudostem nearing maturity	1	5	1.0	296	185	60	0	20.2	151000	302095	151095	2.0	144050	168300	24250	1.17
Fibres like Cotton																		
Spices and condiments	IPM	Popularization of EPN for control of cardamom root grub.		10	4	1350		48	83	57	205000.00	597500.00	392500.00	2.9	181000.00	382800.00	201800.00	2.11
	IPM	Management of shoot fly ( <i>Formosina flavipes</i> ) in small cardamom		10	1	1629	990	63	84	48	280000.00	753600.00	473600.00	2.6	218000.00	414200.00	196200	1.9
	INM	Soil test based fertilizer recommendation	1	10	0.1	9.9	8.0	25	0	0	70000	250000	180000	3.5	75000	150000	75000	2.0
	Crop improvement	Management of berry drop	1	10	0.2	2.6	2.1	23.81	0	0	103000	365000	354700	3.5	105000	265000	160000	2.5
Commercial crops																		
Medicinal and aromatic																		
Fodder																		
Plantation																		

<b>Fibre</b>																			
<b>Others (pl.specify)</b>																			
<b>Others (Mushroom)</b>	Value addition	Packaging of mushrooms in tray packs with cling film cover	-	10	10	0	0	0	0	0	23808	47413	23605	1.99	11970	18400	6430	1.53	
	Productivity improvement of major crops.	Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production	1	0	0	0	0	0	Not done	0	0	0	0	0	0	0	0	0	
<b>Others (Rodents and wild boar)</b>	Control of rodents and wild boar	Castor based herbal extract for control of rodents and wild boar	1	10	1	1.56	0.9	25	0	0	12500	15000	2500	1.2	14000	12000	2000	0.85	
<b>Total</b>																			

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

\*\* BCR= GROSS RETURN/GROSS COST

### Livestock

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy	Animal nutrition and production management	Popularization of mixed fodder system	-	10	10	18	13	15	4%	3%	13610	30420	16810	2.23	14600	23940	9340	1.63
	Disease management	Prophylactic management of Mastitis in dairy animal by using antiseptic solution in teat cups	-	10	10	17	13	15	4.55%	3.5%	14800	24120	9320	1.62	14260	20520	6260	1.43
	Nutrition management	Assessment of GRAND supplement in cross bred cows	-	10	10	17	14	20	2.5%	1%	14520	27720	13200	1.90	13520	22500	8980	1.66
	Poultry																	
	Rabbitry																	
	Pigerry																	
	Sheep and goat																	
	Duckery																	
	Others (pl.specify)																	
<b>Total</b>																		

\* 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: Nil.**

**Other enterprises: Nil.**

**Women empowerment:** Nil.

**Farm implements and machinery:** Nil.

**Other enterprises:** Nil.

**Demonstration details on crop hybrids:** Nil.

## IV. Training Programme

### Training for Farmers and Farm Women 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
<b>Crop Production</b>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Others (Organic farming in vegetable)	1	11	31	42	0	0	0	11	31	42
Others (IPDM in Banana)	2	62	4	66	0	0	0	62	4	66
Others (IPDM in vegetable)	1	80	19	99	14	20	34	94	39	133
<b>Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (Specify)										
<b>b) Fruits</b>										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										

Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques	1	26	4	30	0	0	0	26	4	30
Others (pl.specify)										
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
<b>Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
<b>Livestock Production and Management</b>										
Dairy Management	3	30	3	33	0	0	0	30	3	33

Poultry Management	2	27	0	27	0	0	0	27	0	27
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
<b>Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	3	8	35	43	0	0	0	8	35	43
Women empowerment										
Location specific drudgery production										
Rural Crafts	4	0	55	55	0	0	0	0	55	55
Women and child care										
Others (pl.specify)										
Others (Processing and Packaging of Mushroom)	1	6	4	10	0	0	0	6	4	10
<b>Agril. Engineering</b>										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
<b>Plant Protection</b>										
Integrated Pest Management										
Integrated Disease Management	2	130	29	159	0	0	0	130	29	159
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
<b>Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										

Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
<b>Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	4	49	41	90	4	1	5	53	42	95
Apiculture										
Others (pl.specify)										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>24</b>	<b>429</b>	<b>194</b>	<b>612</b>	<b>18</b>	<b>21</b>	<b>39</b>	<b>436</b>	<b>215</b>	<b>651</b>

**Training for Farmers and Farm Women 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
<b>Crop Production</b>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	1	30	0	30	0	0	0	30	0	30
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
<b>Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (Specify)										
Others(Organic vegetable cultivation )	5	211	89	300	30	10	40	241	99	340
Others (ICM in Vegetables)	2	107	46	153	0	0	0	107	46	153
Others(IPDM in Vegetables)	7	165	159	324	0	16	16	165	175	340
Others(IPDM in Cool Season Vegetables)	1	20	5	25	0	0	0	20	5	25
<b>b) Fruits</b>										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
<b>c) Ornamental Plants</b>										

Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
<b>Soil Health and Fertility Management</b>										
Soil fertility management	5	140	101	241	0	0	0	140	101	241
Integrated water management										
Integrated nutrient management	2	117	25	142	0	0	0	117	25	142
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	1	12	3	15	0	0	0	12	3	15
Nutrient use efficiency	1	150	50	200	0	0	0	150	50	200
Balanced use of fertilizers										
Soil and water testing	1	32	5	37	0	0	0	32	5	37
Others (pl.specify)										
Others (Soil Conservation)	1	120	65	185	0	0	0	120	65	185
<b>Livestock Production and Management</b>										
Dairy Management	3	174	129	303	0	0	0	174	129	303
Poultry Management	3	38	72	110	0	0	0	38	72	110
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										

Production of quality animal products										
Others (pl.specify)										
Others (Goat Management)	3	80	85	165	0	0	0	80	85	165
<b>Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	1	0	17	17	0	0	0	0	17	17
Value addition	3	10	60	70	3	6	9	13	66	79
Women empowerment										
Location specific drudgery production										
Rural Crafts	2	0	26	26	0	10	10	0	36	36
Women and child care										
Others (pl.specify)										
Others (Processing & popularization of Jack fruit)	6	0	1147	1147	0	0	0	0	1147	1147
<b>Agril. Engineering</b>										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
<b>Plant Protection</b>										
Integrated Pest Management										
Integrated Disease Management	8	232	93	325	40	12	52	272	105	377
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Others (ICM in Black Pepper)	1	43	32	75	0	0	0	43	32	75
<b>Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										

Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
<b>Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	1	94	163	257	0	0	0	94	163	257
Apiculture	2	45	0	45	45	0	45	90	0	90
Others (pl.specify)										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>59</b>	<b>1790</b>	<b>2372</b>	<b>4162</b>	<b>118</b>	<b>54</b>	<b>172</b>	<b>1938</b>	<b>2426</b>	<b>4364</b>

**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										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	3	0	15	15	0	0	0	0	15	15
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
<b>TOTAL</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>15</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	8	7	15	0	0	0	8	7	15
Small scale processing										
Post Harvest Technology	1	2	28	30	0	0	0	2	28	30
Tailoring and Stitching										
Rural Crafts	7	0	127	127	0	192	192	0	319	319
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
Any other (Commercial vegetable cultivation and marketing)	1	32	17	49	0	0	0	32	17	49
<b>TOTAL</b>	<b>10</b>	<b>42</b>	<b>179</b>	<b>221</b>	<b>0</b>	<b>192</b>	<b>192</b>	<b>42</b>	<b>371</b>	<b>413</b>

**Training programmes for Extension Personnel including sponsored training programmes (on campus) :** Nil.

**Training programmes for Extension Personnel including sponsored training programmes (off campus):** Nil.

**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	
<b>1</b>	<b>Crop production and management</b>											
1.a.	Increasing production and productivity of crops											
1.b.	Commercial production of vegetables											
1.c.	Integrated Pest and Disease Management	1	25	10	35	0	0	0	25	10	35	
<b>2</b>	<b>Production and value addition</b>											
2.a.	Fruit Plants											
2.b.	Ornamental plants											
2.c.	Spices crops											
<b>3.</b>	<b>Soil health and fertility management</b>											
<b>4</b>	<b>Production of Inputs at site</b>											
<b>5</b>	<b>Methods of protective cultivation</b>											
<b>6</b>	<b>Others (pl.specify)</b>											
<b>7</b>	<b>Post harvest technology and value addition</b>											
7.a.	Processing and value addition											
7.b.	Others (pl.specify)											
<b>8</b>	<b>Farm machinery</b>											
8.a.	Farm machinery, tools and implements											
8.b.	Others (pl.specify)											
<b>9.</b>	<b>Livestock and fisheries</b>											
<b>10</b>	<b>Livestock production and management</b>											
10.a.	Animal Nutrition Management											
10.b.	Animal Disease Management											
10.c.	Fisheries Nutrition											
10.d.	Fisheries Management											
10.e.	Others (pl.specify)											
<b>11.</b>	<b>Home Science</b>											
11.a.	Household nutritional security											
11.b.	Economic empowerment of women											
11.c.	Drudgery reduction of women											
11.d.	Others (pl.specify)											
<b>12</b>	<b>Agricultural Extension</b>											
12.a.	Capacity Building and Group Dynamics											
12.b.	Others (pl.specify)											
	<b>Total</b>	<b>1</b>	<b>25</b>	<b>10</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>10</b>	<b>35</b>	

**Details of Vocational Training Programmes carried out for rural youth**

S.No.	Area of training	No. of Courses	No. of Participants									
			General			SC/ST			Grand Total			
			Male	Female	Total	Male	Female	Total	Male	Female	Total	
<b>1</b>	<b>Crop production and management</b>											
1.a.	Commercial floriculture											
1.b.	Commercial fruit production											
1.c.	Commercial vegetable production											
1.d.	Integrated crop management											
1.e.	Organic farming											
1.f.	Others (pl.specify)											
1.g.	Others (Nutrient Management in Different Crops)	1	0	9	9	0	0	0	0	9	9	
1.h.	Others (RAWA)	1	0	9	9	0	0	0	0	9	9	
1.i.	Others (O.J.T.)	2	44	30	74	0	0	0	44	30	74	
<b>2</b>	<b>Post harvest technology and value addition</b>											
2.a.	Value addition											
2.b.	Others (pl.specify)											
<b>3.</b>	<b>Livestock and fisheries</b>											
3.a.	Dairy farming											
3.b.	Composite fish culture											
3.c.	Sheep and goat rearing											
3.d.	Piggery											
3.e.	Poultry farming											
3.f.	Others (pl.specify)											
<b>4.</b>	<b>Income generation activities</b>											
4.a.	Vermi-composting											
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.											
4.c.	Repair and maintenance of farm machinery and implements											
4.d.	Rural Crafts	2	0	11	11	0	105	105	0	116	116	
4.e.	Seed production											
4.f.	Sericulture											
4.g.	Mushroom cultivation											

4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
<b>5</b>	<b>Agricultural Extension</b>										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	<b>Grand Total</b>	<b>6</b>	<b>44</b>	<b>59</b>	<b>103</b>	<b>0</b>	<b>105</b>	<b>105</b>	<b>44</b>	<b>164</b>	<b>208</b>

### V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	254	269	8	277
Diagnostic visits	46	49	3	52
Field Day	3	20	0	20
Group discussions	0	0	0	0
Kisan Ghosthi	0	0	0	0
Film Show	0	0	0	0
Self -help groups	0	0	0	0
Kisan Mela	0	0	0	0
Exhibition	1	875	120	995
Scientists' visit to farmers field	37	119	0	119
Plant/animal health camps	0	0	0	0
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	1	12	0	12
Farmers' seminar/workshop (Network workshop of KVKs)	1	0	6	6
Method Demonstrations	5	27	0	27
Celebration of important days (World food day)	1	188	13	201
Special day celebration (Environment day)	1	-	-	-
Exposure visits	1	9	0	9
Others (pl.specify)	-	-	-	-
<b>Total</b>	<b>351</b>	<b>1568</b>	<b>150</b>	<b>1718</b>

#### Details of other extension programmes

Particulars	Number
Electronic Media	3
Extension Literature	800
News Letter	1000
News paper coverage	9
Technical Articles	2
Technical Bulletins	3000
Technical Reports	3
Radio Talks	3
TV Talks	0
Animal health camps	3
Others (pl.specify)	-
<b>Total</b>	<b>4823</b>

## VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs : Nil.

### 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	Black pepper	Panniyoor-1	-	884	8840	79
		Panniyoor-4	-	120	1440	46
		Panniyoor-5	-	331	3972	50
		Panniyoor-7	-	756	9072	76
		Chengannoor	-	1965	19650	115
		Karimunda	-	940	9400	39
		Kottanadan	-	259	2590	27
		Malabar excel	-	166	1992	45
		Pournami	-	20	240	1
		IISR Shakthi	-	416	4992	41
		IISR Thevam	-	40	480	16
		Sreekara	-	12	144	1
		Subhakara	-	134	1608	6
		Thekken	-	176	2112	5
		Grimunda	-	651	7812	42
		Arimunda	-	20	240	1
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
<b>Total</b>				<b>16789</b>	<b>74584</b>	<b>886</b>

### Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers				
Bio-pesticide	EPN	49000 nos.	49000.00	548
	Pheromone trap	951 nos.	175935.00	896
	Metarhizium	4 litres	400.00	4
Bio-fungicide	Pseudomonas	2271.50 litres	227150.00	712
	Trichoderma	1163 litres	116300.00	286
Bio Agents	Mushroom spawn	1418.25 kg	170190.00	158
Others (Homecare product)	Detergent powder	80 kg	4000.00	85
Others (Homecare product)	Liquid soap	75 L	1875.00	65
Others (specify)				
<b>Total</b>			<b>7,44,850.00</b>	<b>2754</b>

**Production of livestock and related enterprise materials**

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
<b>Dairy animals</b>				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
<b>Poultry</b>				
Broilers				
Layers	Austrawhite & Gramasree	9	1575	5
Duals (broiler and layer)				
Japanese Quail				
Turkey	Broad Breasted Large White	32	6275	18
Emu				
Ducks				
Others (Pl. specify)				
<b>Piggery</b>				
Piglet				
Others (Pl. specify)				
<b>Fisheries</b>				
Fingerlings				
Others (Pl. specify)				
<b>Total</b>		<b>41</b>	<b>7850</b>	<b>23</b>

**VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2014-15**

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	411	274	86	20550.00
Water	1	1	1	50.00
Plant	0	0	0	0.00
Manure	0	0	0	0.00
Others (Specify)	0	0	0	0.00
<b>Total</b>	<b>412</b>	<b>275</b>	<b>87</b>	<b>20,600.00</b>

**VIII. SCIENTIFIC ADVISORY COMMITTEE**

Number of SACs conducted: One
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**IX. NEWSLETTER**

Number of issues of newsletter published: 1000
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**X. RESEARCH PAPER PUBLISHED**

Number of research paper published
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Nil.
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**XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM****Activities conducted**

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

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