KRISHI VIGYAN KENDRA (IDUKKI)

ANNUAL REPORT-(2018-19)

(FOR THE PERIOD FROM 01 APRIL 2018 TO 31 MARCH 2019)

ICAR - KrishiVigyan Kendra,
BapoojiSevakSamaj,
Pethotty P.O., Santhanpara,
Idukki (Dt.), Pin-685619, Kerala.
Phone: 04868 – 247541, 247715.
E-mail: kvk.Idukki@icar.gov.in, kvksanthanpara@gmail.com
Website URL: www.kvkidukki.org

PART I –GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR - KrishiVigyan Kendra, BapoojiSevakSamaj, Pethotty P.O., Santhanpara, Idukki (Dt.), Pin-685619, Kerala.	04868 – 247541, 247715.	Nil	kvksanthanpara@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		
BapoojiSevakSamaj, 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
Dr. R. Marimuthu, Senior Scientist& Head	-	8157895397	kvksanthanpara@gmail.com

1.4. Year of sanction:1994.

1.5. Staff position as on 31 March 2019

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	Head/Senior Scientist	Dr. R. Marimuthu	Senior Scientist& Head	M	Agronomy	Doctorate in Agriculture - Agronomy	37400-67000	50720	17-01-2019	Permanent	OBC
2	Scientist/SMS	Dr. S. Jayababu	Subject Matter Specialist	M	Animal Science	B.V. Sc. & AH	15600-39100	21000	19-06-1995	Permanent	Others
3	Scientist/SMS	Manju Jincy Varghese	Subject Matter Specialist	F	Soil Science	M.Sc. Agriculture (Soil Science)	15600-39100	21000	10-01-2011	Permanent	Others
4	Scientist/SMS	Dr. Binu John Sam	Subject Matter Specialist	M	Horticulture	Doctorate in Agriculture - Horticulture	15600-39100	21000	17-01-2011	Permanent	Others
5	Scientist/SMS	Sudhakar Soundarajan	Subject Matter Specialist	M	Plant Protection	M.Sc. Agricultural Entomology, MBA	15600-39100	21000	27-01-2011	Permanent	OBC
6	Scientist/SMS	Ashiba A	Subject Matter Specialist	F	Agronomy	M.Sc. Agronomy	15600-39100	21000	07-01-2019	Permanent	Others
7	Scientist/SMS	Preethu K. Paul	Subject Matter Specialist	F	Agri. Extension	M.Sc. Agricultural Extension	15600-39100	21000	07-01-2019	Permanent	Others
8	Programme Assistant (Lab Tech.)	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)	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-1	P. Nandagopal	Driver	M	-	-	5200-20200	7200	05-06-1995	Permanent	OBC
14	Driver-2	P. Sabu	Driver	M	-	-	5200-20200	7000	05-06-1995	Permanent	Others
15	SSS-1	K.O. Jose	Skilled Supporting Staff-1	M	-	-	5200-20200	7000	05-06-1995	Permanent	Others
16	SSS-2	K.T. Mathew	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

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2002	740	47,85,208.10	-	-	-
2.	Farmers Hostel	NA	-	-	-	-	-	*Master Plan & Estimate submitted. Sanction pending.*
3.	Staff Quarters	NA	-	-	-	-	-	-
	1							
	2							
	3							
	4							
	5							
	6							
4.	Demonstration Units							
	1. Duck cum fish culture unit.	RF	2009	50	7,000.00	-	-	-
	2. Mushroom unit	Grama Panchayath, 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	-	-	-
	6.Bio-Hub	State Planning Board	2014	65	1,50,000.00	-	-	-
	7.KarshakaSevaKendram	Department of Agriculture –Vegetable Scheme	2015	100	3,58,000.00	-	-	-
	8. Pheromone Trap Production Unit	RF	2014	10	65,000.00	-	-	-
	9.Pseudomonas Production Unit	Department of Agriculture –Vegetable Scheme	2015	25	50,000.00	-	-	-
	10.Trichoderma Production Unit	Department of Agriculture –Vegetable Scheme	2015	25	50,000.00	-	-	-

	11.EPN Production Unit	Department of Agriculture –Vegetable Scheme	2015	25	70,000.00	-	-	-
	12.Low cost mass multiplication centre	Department of Agriculture	2018	25	20,000.00	-	-	-
	13.Low cost VAM production Unit	Department of Agriculture	2018	10	20,000.00	-	-	-
5	Fencing	NA	-	-	-	-	-	Urgent requirement as the area is constantly facing intuition of wild animals and other intruders
6	Rain Water harvesting system	NA	-	-	-	-	-	-
7	Threshing floor	NA	-	-	-	-	-	-
8	Farm godown	NA	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-
10	-	-	-	-	-	--	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Mahindra Bolero SLE	May - 2012	5,78,380.36	**114433.6**	Good condition.
Honda Aviator	March - 2009	50,000.00	**13146**	Running condition
Motor Bike (Suzuki Shogun)	January - 1995	37,972.78	8864	Irreparable, to be condemned

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
A.V. aids (Specify)			
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	Good Condition (serviced)
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
Soil Science Lab Equipments (Specify)			
KEMI HOT PLATE with Energy Regulator	2006	5,400.00	Not working
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	Not working
Electronic Automatic KEL PLUS model KES 12L (Nitrogen Analyzer)	2006	97,043.00	Not working
Conductivity Meter (PH Meter Utech 510)	2006	21,935.00	Not working

HOT AIR OVEN	2006	13,725.00	Not working
Water bath WDB2 350 x 400 100mm Size 12	2006	41,895.00	Not working
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	Needs replacement
Online UPS System with Battery	2006	36,916.00	Needs replacement
Fume Cupboard KEMI	2006	2,68,192.00	Needs replacement
Bio-control Lab Equipments			
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	required new
Auto Clave	2000	19,000.00	required new
Step up Stabilizer	2008	4,595.00	Good
Other Equipments			
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 Desktop computer
Photostat Machine	2003	80,000.00	Obsolete
Brush Cutter	2009	23,726.00	Good, needs servicing
Fax Machine	2009	15,000.00	Obsolete
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 of SAC meeting conducted during 2018-19

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
07.12.18	36	➢ Introduce and explain the quality of Bio 21 product for cardamom plants. This will reduce the cost of cultivation and improve cardamom production and can be promoted by KVK.	➢ Test sample given to ICAR NBAIR, Bengaluru.	
		➢ For wild elephants and monkey nuisance KVK should try repellant products of KAU and PDCB for testing and then recommend it for future and also make the product available in KVK always.	➢ OFT proposed to mitigate the problem.	
		➢ KVK should recommend foliar spray and cardamom special for post flood management due to heavy soil erosion.	➢ OFT proposed to mitigate the problem.	
		➢ KVK should test milky mushrooms for suitable season and it should be popularized.	➢ FLD completed recently.	
		➢ EPN technology should be	➢ OFT & FLD done, EPN production and supply are being undertaken with the	

		transferred widely to many places, through OFT and FLD.	technical support of ICRI, Myladumpara and NBAIR, Bengaluru.	
		➢ Plantation crops like coffee should be promoted more, with the assistance from Coffee Board and should concentrate more on value added products like coffee juice, coffee flower powder, leaf powder and it should also be used for baking purpose. Horticulture and Home Science Scientists should concentrate on Coffee juice extraction and should conduct trails on the same.	➢ Newly released varieties are being promoted by KVK, Idukki.	Discussions are on with the coffee board regarding value addition aspects.
		➢ KVK programmes and major events should be broadcasted via, All India Radio, Devikulam, through KisanVaniProgramme.	➢ Details of all the current programmes are being broadcasted/telecasted in the print and electronic media.	
		➢ KVK should support All India Radio, Devikulam station to implement a model Kitchen garden at their premises.		A model kitchen garden shall be laid out and implemented at AIR, Devikulam during August-September.
		➢ KVK should encourage and enhance quality layer poultry bird production.	➢ OFT has been initiated and is in progress.	
		➢ All the mandatory technologies should be linked with ATMA.	➢ Popularization of technologies through ATMA technology demonstration mode.	
		➢ Farm mechanization should be popularized.	➢ OFT has been proposed.	
		➢ Farmers should be made aware on the usage of Banned pesticides.	➢ 5 nos. of awareness campaigns have been conducted for the same.	
		➢ Value addition in Jack Products should be popularized.	➢ Vocational training programmes on value addition in jack has been proposed.	
		➢ Increase the number of campaigns on IPM	➢ Campaigns have been proposed in association with the state Department of Agriculture.	

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	Coconut, Tea and coffee plantation
5	Vegetables (Bitter gourd & Cowpea)
6	Cool season vegetables in Devikulam Block
7	Banana cropping
8	Rubber- Pineapple asinter-crop
9	Dairy cattle, Poultry production & Management
10	Mixed Fodder Production

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 11^0 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	NA
2.	Cheenikuzhy series	Fine loamy texture	NA
3.	Thommankuthu series	Clayey texture	NA
4.	Venmani series	Clayey texture	NA
5.	Marayoor series	Clay loam to clayey texture	NA
6.	Pampadumpara series	Clayey texture	NA

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	31165	16505	530
2	Pepper	43790	18726	428
3	Banana	7535	67469	8954
4	Rice	695	1631	2347
5	Coconut	16122	63 million nuts	3907
6	Tapioca	6998	297870	42565
7	Coffee	12717	8310	653
8	Tea	40590	44991	2048

* Directorate of Economics and Statistics, Department of Agriculture and Cooperation.

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 2018	122	30.9	21.8	64.5
May 2018	190	30.4	22.1	62.2
June 2018	156	28.3	21.3	92.1
July 2018	454	27.2	20.7	94.3
August 2018	287	27.5	20.8	94.0
September 2018	184	28.1	20.7	92.8
October 2018	271	27.6	20.5	83.3
November 2018	181	27.0	19.9	83.0
December 2018	73	27.3	18.8	93.0
January 2019	22	27.9	18.4	87.0
February 2019	31	29.2	19.1	79.0
March 2019	55	30.7	20.6	65.0

* IMD, Trivandrum

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

Category	Population	Production	Productivity
Cattle			
Crossbred	195581	637938 ton (Milk) & 28090.87 MT (meat)	3.26 ton (milk)
Indigenous	2522	7309 ton (milk)	2.89 l/day
Buffalo	9177	247779 ton (milk) & 14285.62 MT (meat)	2.7 ton
Sheep			
Crossbred	24	-	-
Indigenous	-	-	-
Goats	173475	17298 ton (Milk) & 11892.10 MT (meat)	-
Pigs			-
Crossbred	27350	23436.5 MT (Meat)	-
Indigenous			
Rabbits	34678	-	-
Poultry			
Hens	937005	15.84 crores (Egg)	-
Desi	-	398 crores (Egg)	-
Improved	-	10.25 crores (Egg) & 45119.8 MT (Meat)	-
Ducks	-	2.98crores (Egg)	-
Turkey and others	-	-	

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

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

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

2.7 District profile maintained in the KVK has been **Updated** for 2018-19: 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	Udumbanchola	Nedumkandam	Anakkara	2016-2018	Bitter gourd	Heavy dosage of fungicides are applied for the control of downy mildew	Bio-Intensive disease management in bitter gourd
2	Devikulam	Devikulam	Kanthaloore	2017-2019	Sugarcane	Excessive use of termiticides is harmful for environment and the results are not sustainable	Bio-Intensive pest management in sugarcane
3	Devikulam	Adimali	Bison valley	2017-2019	Small Cardamom	Indiscriminate use PPC chemical in cardamom plantation	Bio-intensive intervention of pest and drought management in small cardamom
4	Devikulam	Adimali	Bison valley	2017-2019	Cowpea	Indiscriminate use PPC chemical in cowpea	Bio-Intensive pest management in cowpea
5	Devikulam	Devikulam	Kanthalloor	2016-2019	Coconut	RSW is an invasive pest and cause direct damage by sucking sap, profuse honey dew excretion, which get deposited on upper leaf surface cause sooty mould which reduces the photosynthetic efficiency of plants.	Biological control of RugoseSpiralling Whitefly-RSW (*Aleurodicusrugioperculatus*) in Coconut plantation
6	Devikulam	Adimali	Bison valley	2017-2019	Cucumber	Heavy dosage of fungicides/Nematicide are applied for the control of nematodes and root rot	Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions
7	Udumbanchola	Nedumkandam	Kanthipara	2017-18 2018-19	Paddy	Iron Toxicity	Integrated Nutrient Management
8	Udumbanchola	Nedumkandam	Rajakumary	2017-18 2018-19	Pepper	Soil acidity, Potassium, magnesium, Micronutrient deficiency	Integrated Nutrient Management
9	Udumbanchola	Nedumkandam	Kollaparachal	2018-19	Cowpea	Soil acidity, Secondary and micronutrient deficiency	Integrated Nutrient Management
10	Udumbanchola	Nedumkandam	Valiathovala	2018-19	Tapioca and Elephant Foot Yam	Secondary and micronutrient deficiencies	Integrated Nutrient Management

11	Udumbanchola	Nedumkandam	Manjappara	2018-19	Amorphophallus	Lack of acrid free variety	Crop improvement
12	Udumbanchola	Nedumkandam, Devikulam	Muickumthotty, Santhanpara	10 years	Commercial crops and vegetables	Non-availability of quality vegetables and inadequate intake	Growing organic vegetables
13	Idukki	Idukki	Murickasserry	2 years	-	High spoilage &Under utilization of Jack	Diversified jack products preparation and its marketing
14	Udumbanchola	Nedumkandam	Manjappara, Thovala, Rajakumary	1 Year	livestock & Poultry	Non availability of Hybrid poultry birds	Scientific management of poultry
15	Udumbanchola	Nedumkandam	Rajakumary	3 Years	livestock & Poultry	Occurrence of Mastitis	Livestock & Fodder production and management
16	Udumbanchola	Nedumkandam	Kanthippara, Rajakumary	3 Years	livestock & Poultry	Lower milk production	Scientific management of livestock.
17	Udumbanchola	Nedumkandam	Rajakumary	2 Years	livestock & Poultry	Infertility problem	Scientific Disease management of livestock .
18	Udumbanchola	Devikulam	Santhanpara	10 Years	livestock & Poultry	Non availability of quality fodder slips and low milk production	Scientific livestock production and Management
19							
20							

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.	Value addition of farm produce
6.	Crop improvement
7.	Scientific management of livestock and poultry
8.	Scientific Disease Management in dairy cattle and Poultry
9.	Fodder production and management
10.	Popularization of poultry breeds

PART III - TECHNICAL ACHIEVEMENTS (2018-19)

3.A. Target and Achievements of mandatory activities

OFT				FLD			
1				2			
OFTs (No.)		Farmers (No.)		FLDs (No.)		Farmers (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
06	06	38	38	13	13	161	161
				EDP - 1	1	4	4

Training				Extension Programmes			
3				4			
Courses (No.)		Participants (No.)		Programmes(No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
123	98	2706	3207	1164	495	15562	10465

Seed Production (Q)		Planting material (Nos.)	
5		6	
Target	**Achievement**	**Target**	**Achievement**
0.46	0	10000	10000

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	**Achievement**	**Target**	**Achievement**
300	30	19000 litres	5429.5 litres
		3000 kg	3219 kg

3.B1. Abstract of interventions undertaken

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.	Organic farming	Bitter gourd	Heavy dosage of fungicides are applied for the control of downy mildew	Assessment of different biological control agents for the management of downy mildew (*Pseudoperonosporacubensis*) on cucurbits	-	2	0	1	4	0	0	0	1.Extract of licorice 2.Pseudomonas 3.Effective Microorganisms	50 L 50 L 25 L
2.	Organic farming	Sugar cane	Excessive use of termiticides is harmful for environment and the results are not sustainable	Assessment of different biological control agents and herbal based repellents for the management of termites in sugarcane crop	-	1	1	0	1	0	0	0	NBAIR-Herbal Extract EPN *Metarhiziumanisopliae*	35 L 15 kg 50 kg
3.	IPM	Small cardamom	Indiscriminate use PPC chemical in cardamom plantation	-	Bio-intensive intervention of pest and drought management in small cardamom	2	2	1	0	0	0	0	*Bacillus thuringiensis* *Beauveriabassiana* *Apantelessp* *Friona sp* Yellow sticky trap Blue sticky trap Neem oil EPN Trichoderma Pseudomonas Methylobacterium	10 L 20 L 20000 nos 20nos 20nos 7.5 L 4500 20 L 20 L 10 L
4.	IPM	Cowpea	Indiscriminate use PPC chemical in cowpea	-	Bio-intensive Pest Management in cowpea	2	2	0	0	0	0	0	*Trichodermaharzianum* *Hanseniasporauvarum* *Lecanicilliumsaksenae* *Beauveriabassiana* Blue sticky trap Yellow sticky trap	10 L 25 L 20 L 20L 50nos 50nos

5.	IPM	Coconut	RSW is an invasive pest and cause direct damage by sucking sap, profuse honey dew excretion, which get deposited on upper leaf surface cause sooty mould which reduces the photosynthetic efficiency of plants	-	Biological control of RugoseSpiralling Whitefly-RSW (*Aleurodicusrugioperculatus*) in Coconut plantation	1	1	0	0	0	0	0	*Encarsiaguadeloupae and E. dispersa*	25000
6.	IPM	Cucumber	Heavy dosage of fungicides/Nematicide are applied for the control of nematodes and root rot	-	Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions	1	1	0	0	0	0	0	IIHR-organic plant growth enhancer and yield promoters. Paecilomyceslilacinus Pseudomonas	10 kg 15kg 10L
7.	Small Scale Income Generation	Bush Pepper	Lateral shoots wasted after pepper production		Cultivation of Bush Pepper for Additional Income	1	1	0	4	0	200	0	0	200
8.	Production and Management	Milky Mushroom	Poor Productivity of Oyster Mushrooms during Summer Months		Demonstration of Milky Mushroom var. Bheema	1	0	0	4	0	100	0	0	0
9.	Integrated Nutrient Management	Paddy	Iron Toxicity	Assessing the effect of Silicate Solubilizing Bacteria in iron Toxic Soils in Rice Cultivation	-	1	0	0	2	0	0	0	0	0
10.	Integrated Nutrient Management	Pepper	Soil acidity, Potassium , magnesium, Micronutrient deficiency	-	Integrated Nutrient Management in Black Pepper	1	0	0	2	0	0	0	0	0
11.	Integrated Nutrient Management	Cowpea	Soil acidity, Secondary and micronutrient deficiency	Assessing the effect of Sampoorna in Cowpea	-	2	0	0	1	0	0	0	0	0
12.	Integrated Nutrient Management	Tapioca and Elephant Foot Yam	Secondary and micronutrient deficiencies	Assessing the effect of Customized Fertilizer Formulation in Tapioca and Elephant Foot Yam Intercropped in coconut gardens	-	-	0	0	0	0	0	0	0	0
13.	Crop improvement	Amorphophallus	Lack of acrid free variety	-	Demonstration of acrid free variety Gajendra I amorphophallus in high ranges	-	0	0	1	0	0	0	0	0

14.	Growing organic vegetables through nutritional garden	Vegetables	Inadequate intake of vegetables and improper nutritional balance	-	Growing organic vegetables at home through nutritional garden	3	0	0	10	0	250	0	Microfact Neem cake Quick lime super	1 kg 50 kg 10 kg
15.	Value addition	Jack	Under utilization of jackfruit, high spoilage and low income	-	EDP on production and marketing of jack based diversified products through SHG	4	0	0	30	0	0	0	0	0
16.	Disease management	Hybrid dairy cattle	Infertility problem	-	Popularization of GnRH treatment in prolonged estrus animals for improvement of fertility	1	0	0	Field visit-3 Method demonstration -2	Medicines and Supplements	0	0	0	14 litre
17.	Disease Management	Hybrid dairy cattle	Occurrence of mastitis disease	-	Management of Sub clinical mastitis in dairy cows	3	0	0	Field visit-3 Method demonstration -2	Medicines and supplements	0	0	0	0
18.	Feed and fodder management	Fodder	Lack of nutritious, Palatable high yielding fodder variety for dairy farming	-	Demonstration of hydroponics method of fodder production	0	0	0	0	0	Fodder Slips – Maize Sorghum	0	0	0
19.	Disease management	Hybrid dairy cattle	Occurrence of Milk fever disease	-	Demonstration on feeding Anionic Mixture to prevent Milk Fever in dairy cows	3	0	0	Field visit-3, Method demostration-3	Anionic Mixture	0	0	0	0
20.	Evaluation of Breeds	Hybrid Poultry	Unawareness about new breeds	Assessment of Production performance of diff breeds of poultry under homested.	-	2	2	0	Field visit-5	0	0	45 day old poultry birds, supplements feed	0	0

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.	Assessment of different biological control agents for the management of downy mildew (*Pseudoperonosporacubensis*) on cucurbits	JKI, Institute of Biological Control, Darmstadt ,Germany,Kerala Agricultural University and Plant Pathology Research Institute, Agricultural Research Centre, Giza	Bitter gourd	5	0	1	0
2.	Assessment of different biological control agents and herbal based repellents for the management of termites in sugarcane crop	ICAR-NBAIR,Bharathidasan University and TNAU	Sugarcane	10	0	1	0
3.	Bio-intensive intervention of pest and drought management in small cardamom	CRS-KAU,ICRI, TNAU & KVK-Idukki	Small Cardamom	0	5	1	0
4.	Bio-intensive Pest Management in cowpea	KAU-2015 & NBAIR	Cowpea	0	10	1	0
5.	Biological control of RugoseSpiralling Whitefly-RSW (*Aleurodicusrugioperculatus*) in Coconut plantation	ICAR-NBAIR	Coconut	0	50	1	0
6.	Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions	ICAR-IIHR	Cucumber	0	5	1	0
7.	Cultivation of Bush Pepper	KAU, IISR	Black Pepper		1	0	0
8.	HYV of Milky Mushroom	KAU	Mushroom		1	0	0
9.	Assessing the effect of Silicate Solubilizing Bacteria in iron Toxic Soils in Rice Cultivation	KAU, TNAU	Paddy	3	0	1	0
10.	Integrated Nutrient Management in Black Pepper	KAU	Black Pepper	0	5	1	0
11.	Assessing the effect of Sampoorna in Cowpea		Cowpea	5	0	1	0
12.	Assessing the effect of Customized Fertilizer Formulation in Tapioca and Elephant Foot Yam Intercropped in coconut gardens	CTCRI	Tapioca and Elephant Foot Yam	5	0	0	0
13.	Demonstration of acrid free variety Gajendra of Amorphophallus in high ranges	CTCRI	Amorphophallus	0	3	0	0
14.	Growing organic vegetables at home through nutritional garden	KAU	Vegetables	0	1	3	Field visit – 8 FAS -16
15.	**EDP** on production and marketing of jack based diversified products through SHG	KAU	Jack	0	1	5	Method demonstration -6 FAS- 30 Unit Visit- 3
16.	Popularization of GnRH treatment in prolonged estrus animals for improvement of fertility	KVASU	Hybrid dairy cattle	0	1	1	Field visit-3 Method demo-2 FAS-20
17.	Management of Sub clinical mastitis in dairy cows	NDRI	Hybrid dairy cattle	0	1	3	Field visit-3 Method demo-2 FAS-15
18.	Demonstration of hydroponics method of fodder production	NIANP	Fodder	0	1	0	0
19.	Demonstration on feeding Anionic Mixture to prevent Milk Fever in dairy cows	TANUVAS	Hybrid dairy cattle	0	1	3	Field visit-3 Method demostration-3 FAS-15
20.	Assessment of Production performance of diff breeds of poultry under homestead	KVASU,PDP,CODO	Hybrid poultry	1	0	2	Field visit-5 FAS-30

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
5	0	0	0	0	0	0	0	20	10	0	0	0	0	0	0
9	1	0	0	0	0	0	0	30	5	0	0	0	0	0	0
0	0	0	0	5	0	0	0	25	30	0	0	0	0	0	0
0	0	0	0	10	0	0	0	30	5	0	0	0	0	0	0
0	0	0	0	37	13	0	0	115	25	0	0	0	0	0	0
0	0	0	0	4	1	0	0	25	10	0	0	0	0	0	0
0	0	0	0	6	14	0	0	11	18	0	0	0	0	0	0
0	0	0	0	0	5	0	0	5	12	0	0	0	0	0	0
3	0	0	0	0	0	0	0	20	5	0	0	0	0	0	0
0	0	0	0	5	0	0	0	30	0	0	0	0	0	0	0
0	5	0	0	0	0	0	0	15	5	0	0	0	0	0	0
0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	5	0	0	0	13	0	0	0	0	0	0
0	0	0	0	0	4	0	0	0	30	0	0	0	0	0	0
0	0	0	0	3	7	0	0	9	17	0	0	0	0	0	0
0	0	0	0	6	14	0	0	43	37	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	3	17	0	0	58	68	0	0	0	0	0	0
5	5	0	0	0	0	0	0	24	17	0	0	0	0	0	0

PART IV - On Farm Trial(2018-19)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	1	0	0	0	1	0	0	0	1	3
Varietal Evaluation										
Integrated Pest Management	0	0	0	1	0	0	0	0	0	1
Integrated Crop Management										
Integrated Disease Management	0	0	0	0	1	0	0	0	0	1
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**5**

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

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

Total										

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

Thematic areas	Cattle	Poultry	Piggery	Rabbit	Fisheries	TOTAL
Evaluation of Breeds	0	1	0	0	0	1
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	**0**	**1**	**0**	**0**	**0**	**1**

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management	Paddy	Assessing the effect of Silicate Solubilizing Bacteria in iron toxic soils in rice cultivation	03	03	0.2
	Cowpea	Assessing the effect of sampoorna in cowpea cultivation	03	05	0.06
	Tuber crop	Assessing the effect of customized fertilizer formulation for Cassava and Elephant Foot Yam intercropped in coconut garden	05	05	0.02
Varietal Evaluation					
Integrated Pest Management	Sugarcane	Assessment of different biological control agents and herbal based repellents for the management of termites in sugarcane crop	10	10	1
Integrated Crop Management					
Integrated Disease Management	Bitter gourd	Assessment of different biological control agents for the management of downy mildew (*Pseudoperonosporacubensis*) on cucurbits	5	5	1
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					

Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			**26**	**28**	**2.28**

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

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

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	Poultry	Assessment of Production performance of diff breeds of poultry under homestead.	10	10
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			**10**	**10**

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

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

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	Source of technology	Yield	Unit of yield	Observations other than yield	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
Bitter gourd	Irrigated	Heavy dosage of fungicides are applied for the control of downy mildew	Assessment of different biological control agents for the management of downy mildew (*Pseudoperonosporacubensis*) on cucurbits	5	**TO1**- Farmers practice	-	5.6	t/ha	Disease Intensity	122000	1.50	-
					TO2- Spray extract of licorice @ 20ml/L of water from 10-day intervals between each spray	JKI, Institute of Biological Control, Germany	7.5	t/ha	Disease Intensity	187500	3.14	Licorice extract was performed well by recording the low downy mildew incidence and higher economic return
					TO3- Spray Pseudomonas @ 20g/L of water from 10-day intervals between each spray	Kerala Agricultural University	6.2	t/ha	Disease Intensity	155000	2.66	
					TO4-Spray **Effective Microorganisms** @ 5ml/L of water from 10-day intervals between each spray	Plant Pathology Research Institute, Agricultural Research Centre, Giza	6.3	t/ha	Disease Intensity	157500	1.96	
Sugar cane	Irrigated	Excessive use of termiticides is harmful for environment and the results are	Assessment of different biological control agents and herbal based repellents for the management of termites in sugarcane crop	10	**TO1**- Farmers practice	-	66.5	t/ha	-	112850	2.4	

		not sustainable										
					TO2- Drench (NBAIR-Herbal Extract)@ 25ml/L of water. (Three spray in 20 day intervals)	ICAR-NBAIR	70.2	t/ha	Per cent reduction over control	136600	3.10	EPN was performed well by recording the low termites incidence and higher economic return
					TO3- Drench EPN @ 5g/L of water. (Two spray in 20-day intervals)	Bharathidasan University	80.6	t/ha		164000	3.34	
					TO4- Drench Metarhiziumanisopliae @ 30g/L of water. (Four spray in 20-day intervals)	KAU & TNAU	80.1	t/ha		160000	3.17	
Paddy	Rainfed	Soil Acidity, Iron Toxicity	Assessing the effect of Silicate Solubilizing Bacteria in iron toxic soils in rice cultivation.	03	**TO1**- Farmers practice	-	3.12	t/ha	1. Plant Height. 2. No of panicles / sq. m.	45250	1.81	Application of Fine silica reduced iron toxicity and also increased the yield
					TO2- Recommended POP fertilizers + Fine Silica(100 kg/ha) + Lime (150 kg/ha)	KAU	3.75	t/ha		65000	2.18	
					TO3- Recommended POP fertilizers + SSB (3 kg / ha) + Lime (600 kg / ha)	TNAU	3.50	t/ha		58500	2.08	
Cowpea	Irrigated	Soil Acidity, Nutrient deficiency	Assessing the effect of sampoorna in cowpea cultivation	05	**TO1**- Farmers practice	-	12.6	t/ha	1. Average Length of pod. 2. No of seeds / pod.	150000	1.81	Foliar application of sampoorna showed good result in yield, less deficiency symptoms
					TO2- Recommended POP fertilizers	KAU	13.5	t/ha		170500	2.02	
					TO3- Soil test nutrients + Foliar application of Sampoorna @ 5 g/l- 30,45,60 DAS	KAU	15.9	t/ha		222500	2.30	
Tuber crops	Irrigated		Assessing the effect of customized fertilizer formulation in Tapioca and Amorphophallus intercropped	05	**TO1**- Farmers practice	-	Ongoing (Planting done)					
					TO2- Recommended POP fertilizers	KAU						
					TO3- Customized fertilizer formulation @ 500 kg/ha	CTCRI						
					TO4- Customized fertilizer formulation @ 625 kg/ha	CTCRI						
Poultry	Homestead	Poor growth performance and low egg production	Assessment of Production performance of diff breeds of poultry under homestead	10	**TO1**- Rearing of Gramasree chicks as per recommended concentrate feed along with mineral mixture and vitamin supplements	KVASU	1440	Nos.	Age at sexual maturity 150 days	2300.00	1.46	-
					TO2- Rearing of B V 380 chicks as per recommended concentrate feed along with mineral mixture and vitamin supplements	PDP	2640	Nos.	Age at sexual maturity 140 days	4700.00	1.76	-
					TO3- Rearing of Kalinga brown chicks as per recommended concentrate feed along with mineral mixture and vitamin supplements	CPDO	1440	Nos.	Age at sexual maturity 150 days	2100.00	1.41	-

4.C2. Details of Successfully completed / concluded technology assessment (Support with necessary summary of data and photographs)

1)

1. Title of Technology Assessed: **Assessment of different biological control agents for the management of downy mildew (*Pseudoperonosporacubensis*) on cucurbits**

2. Performance of the Technology on specific indicators: Licorice extract was performed well by recording the low downy mildew incidence and higher economic return.

3. Specific Feedback from farmers: Spray extract of licorice @ 20ml/L of water from 10-day intervals between each spray.

4. Specific Feedback from Extension personnel and other stakeholders: Nil.

5. Feedback to Research System based on results and feedback received: Nil.

2)

1. Title of Technology Assessed: **Assessment of different biological control agents and herbal based repellents for the management of termites in sugarcane crop**

2. Performance of the Technology on specific indicators: EPN was performed well by recording the low termites incidence and higher economic return.

3. Specific Feedback from farmers: Drench EPN @ 5g/L of water. (Two spray in 20-day intervals).

4. Specific Feedback from Extension personnel and other stakeholders: Nil.

5. Feedback to Research System based on results and feedback received: Nil.

3)

1. Title of Technology Assessed: **Assessing the effect of silicate Solubilizing Bacteria in iron toxic soils in rice cultivation**

2. Performance of the Technology on specific indicators: Fine silica application reduced iron toxicity.

3.Specific Feedback from farmers: Fine silica @ 100 kg/ha + lime was found effective in controlling iron toxicity symptoms.

4.Specific Feedback from Extension personnel and other stakeholders: Nil.

5. Feedback to Research System based on results and feedback received: Nil.

4)

1. Title of Technology Assessed: **Assessing the effect of sampoorna in cowpea**

2. Performance of the Technology on specific indicators: The treatment with sampoorna gave better result in yield, less deficiency symptoms.

3. Specific Feedback from farmers: Secondary and micronutrient deficiencies were reduced.

4. Specific Feedback from Extension personnel and other stakeholders: Nil.

5. Feedback to Research System based on results and feedback received: Nil.

5)

1. Title of Technology Assessed: **Assessing the effect of customized fertilizer formulation in Tapioca and Elephant Foot yam intercropped in coconut garden**

2. Performance of the Technology on specific indicators: Ongoing.

3. Specific Feedback from farmers: Ongoing..

4. Specific Feedback from Extension personnel and other stakeholders: Ongoing.

5. Feedback to Research System based on results and feedback received: Ongoing.

6)

1. Title of Technology Assessed: **Assessment of Production performance of diff breeds of poultry under homestead**

2. Performance of the Technology on specific indicators: Among these 3 breeds, B V 380 have high production characteristics and well popularized by farmers.

3. Specific Feedback from farmers: Among these 3 breeds, B V 380 have high production characteristics and well popularized by farmers.

4. Specific Feedback from Extension personnel and other stakeholders: Nil.

5. Feedback to Research System based on results and feedback received: Nil.

4.D1. Results of Technologies Refined: Nil.

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Refined	Source of technology	Yield	Unit of yield	Observations other than yield	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
					T.O.1 (Farmers practice)							
					T.O.2							
					T.O.3							

4.D.2. Details of Technologies refined:Nil.

1. Title of Technology Refined

2. Performance of the Technology on specific indicators

3. Specific Feedback from farmers

4. Specific Feedback from Extension personnel and other stakeholders

5. Feedback to Research System based on results/feedback received

PART V - FRONTLINE DEMONSTRATIONS (2018-19)

5.A. Summary of FLDs implemented

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
	Oilseeds													
	Pulses	Irrigated	Kharif	Cowpea	Arka Managala	-	Integrated Pest Management	Bio-intensive Pest and Disease Management in cowpea	1 ha	1 ha	0	10	0	0
	Cereals													
	Millets													
	Vegetables	Irrigated	Rabi	Cucumber	Local	-	Integrated Pest and disease Management	Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions	0.25 ha	0.25 ha	0	5	0	0
		Homestead farming	Rabi	Brinjal, green chilli, cabbage, cauliflower, tomato, cowpea, bitter gourd, beans, amaranthus	Local	-	Growing organic vegetables through nutritional garden	Growing organic vegetables at home through nutritional garden	0.2	0.2	0	0	5	0
	Jack	Homestead farming	-	Jack	Local	-	Value addition	EDP on production and marketing of jack based diversified products through SHG	1 unit	1 unit	0	0	4	0
	Flowers													
	Ornamental													
	Fruit													
	Spices and condiments	Irrigated	Kharif	Small Cardamom	Njallani	-	Organic Farming	Bio-intensive intervention of pest and drought management in small cardamom	3 ha	3 ha	0	05	0	0
		Homestead	Perennial	Black Pepper	Panniyur 1		Small Scale Income Generation	Cultivation of Bush Pepper for Additional Income	200 growbags	200 growbags		20	20	0
		Irrigated	Kharif	Black pepper	Local	-	INM	Integrated Nutrient management in black pepper	0.2 ha	0.2 ha	0	05	0	0
	Commercial													
	Medicinal and aromatic													
	Fodder	Mixed Farming	Throughout the year	Dairy Cattle	Jersey and HF	Cross bred	Fodder production	Demonstration of Hydroponics method of Fodder cultivation	1	1	0	0	1	0

	Plantation	Irrigated	Kharif	Coconut	Local	-	Integrated Pest Management	Biological control of Rugose Spiraling Whitefly-RSW *(Aleurodicusrugioperculatus)* in Coconut plantation	25 ha	25 ha	0	50	0	0
	Fibre													
	Dairy	Mixed Farming	Throughout the year	Dairy Cattle	Jersey and HF	Cross bred	Disease management	Popularization of GnRH treatment in prolonged estrus animals for improvement of fertility	10	10	0	0	3	7
		Mixed Farming	Throughout the year	Dairy Cattle	Jersey and HF	Cross bred	Nutrition Management	Management of Sub clinical Mastitis in dairy cows	20	20	0	0	6	14
		Mixed Farming	Throughout the year	Dairy Cattle	Jersey and HF	Cross bred	Disease Management	Demonstration on feeding Anionic Mixture to prevent Milk Fever in dairy cows	20	20	0	0	3	17
	Poultry													
	Rabbitry													
	Piggery													
	Sheep and goat													
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Milky Mushroom	Homestead	Summer	Milky Mushroom	Bheema	-	Production and Management	Demonstration of Milky Mushroom var. Bheema	100 beds	100 beds	0	5	5	0
	Button mushroom													
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
	Others (Tuber crops)	Irrigated	Summer	Elephant Foot yam	Variety	Gajendra	Varietal Introduction	Demonstration of acrid free variety	0.02	0.02	0	05	0	0

	Others (specify)													

5.A. 1. Soil fertility status of FLDs plots, if analysed

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	
	Oilseeds												
	Pulses	Irrigated	Kharif 2018	Cowpea	Variety	ArkaMangala	Integrated Pest Management	Bio-intensive Pest and Disease Management in cowpea	Kharif 2018	M	M	M	Bitter gourd
	Cereals												
	Millets												
	Vegetables	Irrigated	Rabi 2019	Cucumber	Variety	Local	Integrated Pest Management	Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions	Rabi 2019	H	M	L	Cowpea
	Tuber Crops	Irrigated	Summer 2019	Elephant Foot yam	Variety	Gajendra	Varietal Introduction	Demonstration of Acrid free variety of Gajendra	Summer-2019	H	M	L	Vegetables
	Flowers												
	Ornamental												
	Fruit												
	Spices and condiments	Irrigated	Kharif-2018	Small Cardamom	Variety	Njallani	Organic farming	Bio-intensive intervention of pest and drought management in small cardamom	Kharif-2018	M	M	M	-
		Irrigated	Kharif-2018	Black pepper	Local	-	INM	Integrated Nutrient management in Black Pepper	Kharif-2018	H	H	M	Black Pepper
	Commercial												
	Medicinal and aromatic												
	Fodder												
	Plantation	Irrigated	Kharif 2018	Coconut	Variety	local	Integrated Pest Management	Biological control of RugoseSpiralling Whitefly-RSW *(Aleurodicusrugioperculatus*) in Coconut plantation	Kharif 2018	M	M	M	-
	Fibre												

5.B. Results of FLDs

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	Bio-intensive Pest and Disease Management in cowpea	ArkaManagala	-	Irrigated	10	1	155	125	135	112	21	175000	387500	212500	2.21	165000	300500	135500	1.82
Cereals																			
Millets																			
Vegetables	Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions	Local	-	Irrigated	5	0.25	46	34	42	32	17	31250	82800	51550	2.64	36000	58000	22000	1.61
	Growing organic vegetables at home through nutritional garden	Local	-	Homestead farming	5	0.2	135	130	132.75	84.75	37.85	130000	262677	132650	2.01	37000	53500	16500	1.44
Jack	EDP on production and marketing of jack based diversified products through SHG	Local	-	Homestead farming	4	1 unit	0	0	0	0	0	95000	173250	78250	1.82	0	0	0	0
Flowers																			
Ornamental																			
Fruit																			
Spices and condiments	Bio-intensive intervention of pest and drought management in small cardamom	Njallani	-	Rainfed	5	3	62	54	57	45	30	310000	690000	380000	2.22	365000	540000	175000	1.47
	Integrated Nutrient Management in Black pepper	Local	-	Irrigated	05	0.2	4.9	4.6	4.8	3.2	33	84094	196320	112226	2.33	90062	175600	85538	1.94
Black Pepper	Cultivation of Bush Pepper for Additional Income	Panniyur 1	-	Homestead	20	10 growbags each	0	0	0	0	0	800	1560	760	1.95	0	0	0	0
Commercial																			
Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder																			
Plantation	Biological control of RugoseSpiralling Whitefly-RSW (*Aleurodicusrugioperculatus*) in Coconut plantation	Local	-	Rainfed	50	25	9600 nos.	7200 nos.	8200 nos.	6350 nos.	15	65000	150000	85000	2.30	50000	98000	48000	1.96
Fibre																			
Others (Tuber Crops)	Demonstration of acrid free varietyGajendra of Amorphophallus in high ranges	Variety	Gajendra	Irrigated	05	0.02											Ongoing (Planting done)		

Others (pl.specify)																			

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

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Biological control of RugoseSpiralling Whitefly-RSW (*Aleurodicusrugioperculatus*) in Coconut plantation		
Pest Reduction (%)	18	52
Bio-intensive intervention of pest and drought management in small cardamom		
Pest Reduction (%)	29	40
Disease incidence (%)	26	61
Bio-intensive root rot and root knot nematodes management of cucumber under poly house conditions		
Disease incidence (%)	26	45
Bio-intensive Pest and Disease Management in cowpea		
Pest Reduction (%)	29	40
Disease incidence (%)	16	32
INM in Pepper		
No of Spikes/vine (No)	200	148
Spike Length (cm)	10 cm	6 cm
Growing organic vegetables at home through nutritional garden		
Acceptability	High	Average
Demonstration of Milky Mushroom Var. Bheema		
Shelf Life	4 days	2 days
Consumer acceptance	Moderate to High	Moderate

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (kg/animal)				% 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	Demonstration on feeding Anionic Mixture to prevent Milk Fever in dairy cows	Jersey and HF	20	20	18	13	15	14	28.57	45675	83872.5	38197.5	1.86	45307.5	70242.5	24935	1.55
Dairy	Popularization of GnRH treatment in prolonged estrus animals for improvement of fertility	Jersey and HF	10	10	90	50	70	30	133.33	45620	85995	40375	1.88	45175	71295	26120	1.58
Dairy	Management of Sub clinical Mastitis in dairy cows	Jersey and HF	20	20	23	19	20	18	27.77	45250	84525	39275	1.86	44765	69825	25060	1.56
Fodder crops	Demonstration of Hydroponics method of Fodder cultivation	On going	1	1													
Poultry																	
Rabbitry																	
Pigerry																	

Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check if any**
Demonstration on feeding Anionic Mixture to prevent Milk Fever in dairy cows		
Disease Incidence (%)	0	40%
Popularization of GnRH treatment in prolonged estrus animals for improvement of fertility		
Number of AI	02	04
Management of Sub clinical Mastitis in dairy cows		
Disease Incidence (%)	0	40 %

5.B.3. Fisheries: Nil.

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

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

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

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

5.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Yield				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)				*Economics of check (Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oyster mushroom																	
Milky Mushroom	Demonstration of Milky Mushroom var. Bheema	Bheema	5	100 beds	1.6	1.22	1.37	1.25	0.96	85	410	325	4.82	90	375	285	4.16
Button mushroom																	

Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	

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

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

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

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

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check			Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

* 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 laboursaved(viz., reduction in drudgery, time etc.)

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

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

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	1	25	-
2	Farmers Training	6	93	-
3	Media coverage	1	Mass	-
4	Training for extension functionaries	6	185	-
5	Method Demonstration	5	35	-
6	Field visit	13	45	-

PART VI – DEMONSTRATIONS ON CROP HYBRIDS(2018-19): Nil.

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Cereals																	
Bajra																	
Maize																	
Paddy																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	

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

H-High L-Low, A-Average

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

PART VII. TRAINING(2018-19)

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
Crop Production										
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)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										

Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers	2	59	18	**77**	0	0	**0**	59	18	**77**
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management	1	6	4	**10**	0	0	**0**	6	4	**10**
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	3	51	18	**69**	0	0	**0**	51	18	**69**
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										

Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	1	40	0	**40**	0	0	**0**	40	0	**40**
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (Post flood crop management)	1	25	5	**30**	0	0	**0**	25	5	**30**
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production	1	15	0	**15**	0	0	**0**	15	0	**15**
Vermi-compost production										
Organic manures production										

Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development	1	20	10	**30**	0	0	**0**	20	10	**30**
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	8	15	**23**	0	0	**0**	8	15	**23**
Others (pl. specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**11**	**224**	**70**	**294**	**0**	**0**	**0**	**224**	**70**	**294**

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
Crop Production										
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)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										

Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	2	70	25	**95**	0	0	**0**	70	25	**95**
Integrated water management										
Integrated nutrient management	2	100	50	**150**	0	0	**0**	100	50	**150**
Production and use of organic inputs										
Management of Problematic soils	1	35	10	**45**	0	0	**0**	35	10	**45**
Micro nutrient deficiency in crops	1	30	3	**33**	0	0	**0**	30	3	**33**
Nutrient use efficiency										
Balanced use of fertilizers	2	75	15	**90**	0	0	**0**	75	15	**90**
Soil and water testing	1	20	5	**25**	0	0	**0**	20	5	**25**
Others (Post flood crop management)	1	20	0	**20**	0	0	**0**	20	0	**20**
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	4	23	69	**92**	0	0	**0**	23	69	**92**
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	5	20	133	**153**	0	0	**0**	20	133	**153**
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	0	22	**22**	0	0	**0**	0	22	**22**
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	5	92	13	**105**	103	53	**156**	195	66	**261**
Integrated Disease Management	2	83	33	**116**	0	0	**0**	83	33	**116**
Bio-control of pests and diseases	3	35	2	**37**	84	0	**84**	119	2	**121**
Production of bio control agents and bio pesticides										
Others (Organic vegetable cultivation)	1	25	10	**35**	31	2	**33**	56	12	**68**
Others (Organic spice cultivation)	1	70	35	**105**	0	0	**0**	70	35	**105**
Others (Organic spice cultivation)	1	40	2	**42**	0	0	**0**	40	2	**42**
Others (Liquid fertilizers and growth promoters)	1	77	3	**80**	0	0	**0**	77	3	**80**
Others (GAP-Small cardamom)	5	189	12	**201**	25	0	**25**	214	12	**226**
Others (Post Flood management in small cardamom)	1	40	2	**42**	10	2	**12**	50	4	**54**
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										

Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production	1	8	0	**8**	0	0	**0**	8	0	**8**
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**41**	**1052**	**444**	**1496**	**253**	**57**	**310**	**1305**	**501**	**1806**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production (ASCI Training on Mushroom grower)	1	7	13	**20**	0	0	**0**	7	13	**20**
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**1**	**7**	**13**	**20**	**0**	**0**	**0**	**7**	**13**	**20**

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	1	20	0	**20**	15	5	**20**	35	5	**40**
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	36	0	159	**159**	2	579	**581**	**2**	**738**	**740**
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**37**	**20**	**159**	**179**	**17**	**584**	**601**	**37**	**743**	**780**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (Value addition)	1	13	2	**15**	0	0	**0**	13	2	15
Any other (pl.specify)										
Total	**1**	**13**	**2**	**15**	**0**	**0**	**0**	**13**	**2**	**15**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	2	38	10	**48**	2	2	**4**	54	12	**66**
Integrated Nutrient management	2	65	3	**68**	0	0	**0**	65	3	**68**
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (Importance of soil testing, problematic soil)	1	36	0	**36**	0	0	**0**	36	0	**36**
Any other (pl.specify)										
Total	**5**	**139**	**13**	**152**	**2**	**2**	**4**	**155**	**15**	**170**

7.G. Sponsored training programmesconducted

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**	1	50	10	**60**	0	0	**0**	50	10	**60**
4	**Production of Inputs at site**	1	10	5	**15**	39	8	**47**	49	13	**62**
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	CapacityBuilding and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	**2**	**60**	**15**	**75**	**39**	**8**	**47**	**99**	**23**	**122**

Details of sponsoring agencies involved

1. IMISHREE Milk Producers Company
2. DIC
3. ATMA
4. Coffee Board
5. KADS
6. High-Range Producer Federation
7. i-STED
8. Department of Agriculture
9. State Horticulture Mission
10. MANAGE, Hyderabad
11. ASCI, New Delhi

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

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

7.I. Details of Skill Training Programmes carried out by KVKs under ASCI

S. No.	Name of Job Role	Date of Start	Date of Assessment	Total Expenditure (Rs.)	No. of Participants									No of Participants passed assessment
					General			SC/ST			Grand Total			
					Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	Mushroom Grower	18-02-2019	21-03-2019	165200	5	8	13	2	5	7	7	13	20	15
2.	Beekeeper	21-01-2019	27-03-2019	141300	18	1	19	1	0	1	19	1	20	20

PART VIII – EXTENSION ACTIVITIES(2018-19)

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	1	20	04	24	0	0	0	1	0	01
KisanMela	0	0	0	0	0	0	0	0	0	0
KisanGhosthi	0	0	0	0	0	0	0	0	0	0
Exhibition	2	2629	2829	5458	220	330	550	206	146	352
Film Show	0	0	0	0	0	0	0	0	0	0
Method Demonstrations	9	82	16	98	0	0	0	4	5	9
Farmers Seminar / Workshop	6	206	90	296	0	0	0	25	30	55
Workshop	0	0	0	0	0	0	0	0	0	0
Group meetings	10	85	48	133	0	93	93	10	30	40
Lectures delivered as resource persons	6	375	366	741	0	0	0	0	28	28
Newspaper coverage	2	0	0	0	0	0	0	0	0	0
Radio talks	2	0	0	0	0	0	0	0	0	0
TV talks	1	0	0	0	0	0	0	0	0	0
Popular articles	3	0	0	Mass	0	0	0	0	0	0
Newsletter	1	0	0	Mass	0	0	0	0	0	0
Extension Literature	7	0	0	Mass	0	0	0	0	0	0
Advisory Services	90	142	109	251	15	0	15	8	4	12
Scientific visit to farmers field	40	136	51	187	0	0	0	29	25	54
Farmers visit to KVK	246	290	25	315	0	0	0	13	1	14
Diagnostic visits	10	54	6	60	0	0	0	5	8	13
Exposure visits	0	0	0	0	0	0	0	0	0	0
Ex-trainees Sammelan	2	26	16	42	0	35	35	6	14	20
Soil health Camp	6	161	42	203	0	0	0	6	6	12
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	34	3	160	163	0	287	287	6	89	95
MahilaMandals Conveners meetings	0	0	0	0	0	0	0	0	0	0
Celebration of important days (World Soil Day)	1	110	7	117	0	0	0	02	01	03
Celebration of important days (World Food Day)	1	10	20	30	0	0	0	0	0	0
Celebration of important days (specify)	15	250	249	499	0	0	0	62	98	160
Any Other (Specify)	0	0	0	0	0	0	0	0	0	0
Total	**495**	**4579**	**4038**	**8617**	**235**	**745**	**980**	**383**	**485**	**868**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIAL (2018-19)

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

Crop category	Name of the crop	Name of the Variety	Name of the Hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						

Forest Species						
Others (specify)						
Total						

9.B. Production of planting material 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	Panniyur-1,2	-	10000	120000.00	90
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				**10000**	**120000.00**	**90**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (q)	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	VAM	2495	249500.00	345
Bio-pesticide	Beauveria, Beauveria Test tube, Metarhizium, Metarhizium test tube, Entomo Pathogenic Nematode, Neem oil &Neem Soap	1074	382225.00	788
Bio-fungicide	Pseudomonas, Pseudomonas Test tube, Trichoderma, Trichoderma Test tube, Paceliomyces& Downy controller	4076	529100.00	1785
Bio Agents	Pheromone trap	40	6000.00	15
Others (Micronutrient mixtures)	Effective Microorganisms	964	289200.00	256
Total		**8649**	**14,56,025.00**	**3189**

9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers	Gramasree, BV 380 &Kalinga brown	12	3600.00	4
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				

Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total		**12**	**3600.00**	**4**

PART X – PUBLICATIONS, SUCCESS STORY, INNOVATIVE METHODOLOGY, ITK, TECHNOLOGY WEEK

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

(A) KVK Newsletter:
Date of start:6-12-18Periodicity: Annual, Copies printed in each issue: 500

(B) Literature developed/published

Item	Number
Research papers- International	0
Research papers- National	0
Technical reports	3
Technical bulletins	42
Popular articles– English	0
Popular articles – Local language	3
Extension literature	7
Others (Pl. specify) News Paper coverage News Letter	 2 1
TOTAL	**58**

10.B. Details of Electronic Media Produced:

S. No.	Type of media	Title	Details
1	**CD / DVD**		
2	**Mobile Apps**		
3	Social media groups with KVK as Admin	Kallar Grower Association	Small Cardamom Group
		Mushroom Grower	Mushroom Farmers group
		Mushroom Gang	Mushroom Growers Club
		Healthy Agriculture	Vegetable Farmers
		Honey Bee Grower association	Honey Bee farmers
4	Facebook account name	BapoojiKVKSanthanpara	Updation of KVK activities
5	Instagram account name	-	-

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).

This will be considered only with suitable photos for further reporting/reference.

1. Title of the success stories : Vegetable Seedling Production Unit

Details of success stories :

1.Background

Nedumkandam is an area which is mostly regarded as a hub for vegetable cultivation in the district. Many interventions were carried out over the years for the holistic development of vegetable farmers. All these were

channelized and overall improvement was observed, but the cost of farming remained bit on the higher side despite of many labour saving methods adopted and input channelization. On critical analysis of the scenario, it was found that a majority of the initial input cost was towards planting material which was sourced from a distant place and at a high price. Further, the follow-up for gap filling on the main field posed a more greater non-visualized problem, which lead to the ultimate reduction in yield. This lead to a thought among the vegetable growing folk of the region to have a well established vegetable nursery in the region, which can cater to their needs round the year.

Training programmes were organized during 2013-14 for vegetable seedling production and nursery management. Of the many participants, Ms. Manju Mathew, Ullathu, Anjumukku, Valiyathovala, 685514, (mob: 9544761240), a lady with an urge to have this venture as livelihood approached ICAR KVK, Idukki and submitted an initial project proposal to start a vegetable seedling nursery in an area of just 5 cents. On scrutiny of their site with their proposal, it was found that the site could be made to ten cents with limited extra effort and could be submitted to the district panchayat for full funding. The unit, christened as Harithasree Nursery, was initiated during December, 2014 with limited resources. Ms. Manju Mathew, along with her family members and relatives struggled hard to get things into shape. The initial years were hardships for them as they could not get sales orders correctly at the right time. ICAR KVK Idukki intervened in this aspect also by meeting government machinery and clearing the obstacles. During the third year of their venture, they could break even on the input costs and move on with a minimum profit. During the year 2018-19, her input cost for the 10 cent poly house was Rs. 7.12 lakhs for producing 5 lakhs of seedlings and the Gross returns were Rs. 11.84 lakhs, getting Ms. Manju a net profit of Rs. 4.72 lakhs. During this period, she had constructed additional rain shelters too for hardening the plantlets and for further expanding her venture.

2.Intervention process

- Feasibility assessment of the site earmarked for construction of rain shelter.
- Availability of all the basic input resources
- Project formulation and onward submission to District Panchayat for grant.
- Hands-on training on nursery production and management of vegetable seedlings.
- Timely intervention on different stages of seedling growth.
- Intervention for getting adequate sales tenders from department machinery.
- Advisory services.
- Follow-up visits and technical support as and when required.

3.Intervention Technology

- Created a platform, where farmers could understand their strengths, weaknesses, opportunities and threats in current system of farming.
- Hand holding activities to all those who had entrepreneurial urge and to promote result oriented agri-business concepts.
- Timely intervention, not just for farming activities, but also for allied support inventory.

Corrective deliberations and fool proof measures in all the stages of entrepreneurial development.

4.Impact Horizontal Spread

M/s. Harithasree Vegetable Seedling Nursery, Valiyathovala is aimed at giving employment directly to 50 rural youth and many multiples of it, indirectly through the never ending increase in demand for quality vegetable seedlings at the right planting season *ex-situ*. This would reduce the cost of cultivation at the farmers end, making the demand increase every year. This is evident from the increase in seedling requirement in the vegetable growing area of Nedumkandam and adjoining blocks of Idukki district.

5.Impact Economic Gains

An economic gain of around Rs. 5.00 lakhs per annum is now being realized on an average after getting the unit to a breakeven point.

6.Impact on Employment Generation

Employment generation through self-employment ventures is the need of the hour. Those benefitted through these ventures are indirectly getting hands on experience also to be independent at a point of time. This venture

provides employment to over 50 persons every year. It will also provide as a knowledge hub for trainings related to vegetable seedling, thereby paving way for further chance of employment generation.

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

Details of success stories :

1.Background

A group of 45 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 sticken, 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 of Rs.22000/-

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 inturn 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.




3. Title of the success stories **:**Women Entrepreneurship - A Success

Details of success stories :

1.Background

Mrs. Lovely Babu, Kollarackal, Rajakumarypanchayat in Idukki district. She was raised in a below middle class family. She always dreamt of reaching the sky, but all her talents and dreams were buried due to the responsibilities of her family since she was the elder child. She always had the desire to make varieties of artificial flowers and handicrafts. In her childhood days she used to collect dry leaves and flowers from the forest nearby and

used to make different varieties of bouquet arrangements but no one realized her talents and abilities. Even after her marriage, she had been struggling for twenty years to bring up her children and to look after her in laws. But all these problems were silly as compared to her great dream. She always kept in touch with her interest and dreams. Six months ago fortunately, she got a chance to attend the vocational training conducted under KVK Rural craft discipline. She was inspired by the motivations she received from Mrs. Rachel Skaria, Programme Assistant of Rural craft discipline, KVK. Her support brought great changes in Mrs. Lovely's hidden talents. Both of them combined their ideas and brought a change in their creations and marketing trends. They visited various forests, hills, valleys and farms in the neighbouring states of Kerala, Tamil Nadu and Karnataka to collect raw-materials like varieties of dried grasses, areca sheets, palm leaves, corn husk, different types of cereals etc. They met owners of farms and seek their permission to pick up agricultural wastes; they visited bread factories to collect discarded bread to make different varieties of flowers. Now Mrs. Lovely is an example how a woman can effectively utilize their talents and leisure time for income generation. She has taken bulk orders from fancy stores, local markets and she has participated in flower shows and exhibitions, now she started online marketing. She has employed two ladies to work along with her. The main finishing work is done by her and the rest of the work is done by the women 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 earns an average profit of Rs. 25000 / month

6.Impact on Employment Generation

Motivated from the above mentioned Mrs. Lovely's successful enterprise, 12 rural women formed a self help group named Arts Vigyan SHG under Rural Craft discipline KVK; they started designing, jewelry making and production of home care products 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

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Mushrooms	Use of spinning machine	To get the media dried quickly
2.	Mushrooms	Use of hand held blower	To get rid of small insects on mushroom beds

10 F. Technology Week celebration during 2018-19:

Period of observing Technology Week : From 13.02.2019 to 15.02.2019
Total number of farmers visited : 1140
Total number of agencies involved : 8
Number of demonstrations visited by the farmers within KVK campus : 684

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized	13	1009	Cardamom, Pepper , Fruits and Vegetables
Exhibition	45	2168	Dept. of Agriculture, Fisheries, CRS, ICRI, ATMA, VFPCK, Animal Husbandry, Private Agencies.
Film show			
Fair			

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)	45	100	
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)	13.5	12	
Bio Fertilizers (q)	0.27	18	
Supply of fingerlings			
Supply of Livestock specimen (No.)	12	5	
Total number of farmers visited the technology week		1680	

PART XI – SOIL AND WATER TEST

11.1 Soil and Water Testing Laboratory

A.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 Homogensing (khan shaker) Model LKS2 platform size 75cmx43cmx10cm	1	20,880.00
4.	Rotary Shaker	1	16,200.00
5.	Machinery for drying (Hot air oxen) 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
Total		**12**	**4,64,588.00**

B. Details of samples analyzed since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	2792	1735	42	229600.00
Water Samples	0	0	0	0
Plant samples	0	0	0	0
Manure samples	0	0	0	0
Others (specify)	0	0	0	0
Total	**2792**	**1735**	**42**	**2,29,600.00**

C. Details of samples analyzed during the 2018-19:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	450	220	20
Water Samples	0	0	0
Plant samples	0	0	0
Manure samples	0	0	0
Others (specify)	0	0	0
Total	**450**	**220**	**20**

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1. Two Mridaparikshak kit	21/6/17	Working
2.		

B. Details of soil samples analyzed during 2018-19 and since establishment with Mobile Soil Testing Kit:

	Progress during 2018-19	Cumulative progress
Samples analyzed (No.)	450	844
Farmers benefited (No.)	220	554
Villages covered (No.)	20	42

11.3 Details of soil health cards issuedbased on SWTL &Mobile Soil Testing Kitduring 2018-19:

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	-	-	-	-	-
Mobile Soil Testing Kit	25/4/18	01	27	45	45
	28/5/18	02	08	18	18
	22/6/18	03	05	09	09
	18/7/18	01	08	08	08
	13/8/18	01	01	03	03
	20/9/18	05	41	53	53
	25/10/18	01	06	08	08
	27/11/18	01	38	62	61
	31/12/18	01	21	30	30
	29/1/19	01	14	44	44
	28/2/19	01	25	78	78
	25/3/19	02	26	93	93

11.4 World Soil Health Day celebration

Sl. No.	Farmers participated (No.)	Soil health cards issued (No.)	VIPs (MP/ Minister/MLA attended (No.)	Other Public Representatives participated	Officials participated (No.)	Media coverage (No.)
1.	120	100	0	SanthanparaPanchayatPresident	3	1

PART XII. IMPACT

12.A. Impact of KVK activities (Not 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)
EPN	1250	65	295000/ha	383000/ha
Neem Soap	260	35	135000/ha	212000/ha
EM Decomposer	1050	40	230000/ha	360000/ha
Cardamom special	550	55	264100/ha	372000/ha
Pepper Special	300	30	41538/ha	102226/ha
Banana Special	150	15	550000/ha	620000/ha
Vegetable Special	100	10	315000/ha	390000/ha
SOP Sprays for Nendran Banana	150	45	600/bunch	830/bunch
Protray production of vegetable seedlings	45	35	120000/0.5 acres	320000/0.5 acres

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

12.B. Cases of large scale adoption (Please furnish detailed information for each case with suitable photographs)

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

PART XIII - LINKAGES

13A. Functional linkage with different organizations

Name of organization	Nature of linkage
Department Of Agriculture	MDDT, Field Visits, Trainings, EAP
ATMA	MDDT, Field Visits, Trainings, EAP
Department Of Animal Husbandry	Field Visits, Trainings
Department of Forestry	Tribal Development Projects, Trainings
VFPCK	MDDT, Field Visits, Trainings
PDS	Sub-centre for organic farming
Coffee Board	Trainings, Field Visits
Spices Board	Trainings, Field Visits

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

13B. List of special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
DAESI Programme	19/05/2018	MANAGE-ATMA-IDUKKI	18,00,000.00

13C. Details of linkage with ATMA

Coordination activities between KVK and ATMA

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 meetings	6	2	-
02	Research projects	-	0	0	-
03	Training programmes	Low cost production of bio inputs	8	8	-
04	Demonstrations	Soil sampling methods	2	1	-
		PPFM	10	10	-
		Hanseniaspora	5	5	-
05	Extension Programmes	-	0	0	-
	KisanMela	-	0	0	-
	Technology Week	Thalir-2019	1	1	-
	Exposure visit	DAESI	3	3	-
	Exhibition	Thalir-2019	1	1	-
	Soil health camps	Soil Test Campaign	2	2	
	Animal Health Campaigns	-	0	0	-
	Others (Pl. specify)	-	0	0	-
06	Publications	-	0	0	-
	Video Films	-	0	0	-
	Books	-	0	0	-
	Extension Literature	-	1	0	-
	Pamphlets	-	0	0	-
	Others (Pl. specify)	-	0	0	-
07	Other Activities (Pl.specify)	-	0	0	-
	Watershed approach	-	0	0	-
	Integrated Farm Development	-	0	0	-
	Agri-preneurs development	-	0	0	-

	Farmers Field School	FS	8	0	-

13D. Give details of programmes implemented under National Horticultural Mission: Nil.

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

13E. Nature of linkage with National Fisheries Development Board:Nil.

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

13F. Details of linkage with RKVY :

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	**Bee Keeper**	**Skill Training**	**Yes, Rs.141300.00**	**Rs.141300.00**	**-**
2	**Mushroom Grower**	**Skill Training**	**Yes, Rs.165200.00**	**Rs.165200.00**	**-**

13G. Kisan Mobile Advisory Services: Nil.

Month	Message type (Text/Voice)	SMS/voice calls sent (No.)						Total SMS/Voice calls sent (No.)	Farmers benefitted (No.)
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
April 2018									
May									
June									
July									
August									
September									
October									
November									
December									
January 2019									
February									
March									
Total									

PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

14A. Performance of demonstration units (other than instructional farm): Nil.

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

14B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									

Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

14C. 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	1449	72450.00	173880.00	-
2.	Pseudomonas Test tube	11	1100.00	5500.00	-
3.	Trichoderma	2456	122800.00	294720.00	-
4.	Trichoderma Test tube	60	6000.00	30000.00	-
5.	Beauveria	159	7950.00	19080.00	-
6.	Beauveria Test tube	17	1700.00	8500.00	-
7.	Metarhizium	161	8050.00	19320.00	-
8.	Metarhizium test tube	2	200.00	1000.00	-
9.	Effective Microorganisms	964	115680.00	289200.00	-
10.	VAM	2495	187215.00	249500.00	-
11.	Entomo Pathogenic Nematode	248.5	106855.00	161525.00	-
12.	Neem oil	360	45000.00	135000.00	-
13.	Pheromone trap	40	3000.00	6000.00	-
14.	Paceliomyces	50	5000.00	15000.00	-
15.	Downy controller	50	5000.00	10000.00	-
16.	Neem Soap	126	15120.00	37800.00	-
Total		**8,648.50**	**7,03,120.00**	**14,56,025.00**	-

14D. 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.	Hybrid poultry birds	B V 380	layer	30	4800.00	1200.00	-

14E. Utilization of hostel facilities: NA.

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2018			
May			
June			
July			
August			
September			
October			
November			

December			
January 2019			
February			
March			

14F. Database management

S.No	Database target	Database created
1.	Farmers database (FLD, OFT & DBT, Training)	Database for (2018-19)

14G. Details on Rain Water Harvesting Structure and micro-irrigation system: Nil.

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		

PART XV - FINANCIAL PERFORMANCE

15A. 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 India	Rajakumary	70453	BapoojiKrishiVigyan Kendra (Rev Fund)	67155078042	6850002932	SBIN0070453
Main Grant Account	State Bank of India	Rajakumary	70453	BapoojiSevakSamajKrishiVigyan Kendra	57060836995	6850002932	SBIN0070453

15B. Utilization of KVK funds during the year 2018-2019(Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	107.81	107.81	107.14108
2	**Traveling allowances**	1.25	1.25	1.25
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.15	2.15	2.15
B	POL, repair of vehicles, tractor and equipments	1.90	1.90	1.90
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.00	1.00	1.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.35	0.35	0.35
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.72	2.72	2.72
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	1.50	1.50	1.50
G	Training of extension functionaries	0.20	0.20	0.20
H	Maintenance of buildings	0.50	0.50	0.50
I	Establishment of Soil, Plant & Water Testing Laboratory	0.25	0.25	0.24999
J	Library	0.03	0.03	0.03
K	Extension activities	0.38	0.38	0.38
L	Farmers Field School (FFS)	0.30	0.30	0.30
M	EDP	0.37	0.37	0.37
N	ARM	1.20	1.20	1.20
TOTAL (A)				
B. Non-Recurring Contingencies				
1	**Works**	0.00	0.00	0.00
2	**Equipments including SWTL & Furniture**	0.00	0.00	0.00
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0.00	0.00	0.00
4	**Library** (Purchase of assets like books & journals)	0.00	0.00	0.00
TOTAL (B)		**0.00**	**0.00**	**0.00**
C. REVOLVING FUND		**0.00**	**0.00**	**0.00**
GRAND TOTAL (A+B+C)		**121.91**	**121.91**	**121.24**

15C. Status of revolving fund (Rs. in lakh) for the last three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year

April 2016 to March 2017	4,27,760.00	19,86,677.00	20,03,911.00	4,10,526.00
April 2017 to March 2018	4,10,526.00	24,53,736.00	15,22,669.00	13,41,593.00
April 2018 to March 2019	13,41,593.00	30,33,360.00	30,22,873.00	13,52,080.00

16. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
SudhakarSoundarajan	SMS-Plant Protection	AESA based PHM in conjunction with Ecological Engineering (EE) for Pest Management (PM)	ICAR-NBAIR	03/02/2019
SudhakarSoundarajan	SMS-Plant Protection	Bio-Intensive pest management in vegetables	ICAR-IIHR	04/02/2019
SudhakarSoundarajan	SMS-Plant Protection	GAP-Strawberry cultivation	ICAR-KVK,Baramarthi	06/09/2018
Ashiba A	SMS- Agronomy	Documentation of KVK mandatory activities	ICAR-KVK, Erode	04/02/2019 to 05/02/2019
Preethu K. Paul	SMS- Agrl Extension			

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