

ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA (IDUKKI)

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Bapooji Krishi Vigyan Kendra, Santhanpara P.O., Idukki (Dt.), Pin-685619, Kerala.	04868 – 247541, 247715.	04868 – 247715	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		
Bapooji Sevak Samaj, Kakkattu, Meenadom P.O., Pampady, Kottayam (Dt.), Pin-686 516, Kerala.	0481-2506271 +919446826019	NIL	chairmankvkidukki@rediffmail.com	www.kvkidukki.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. S. Jayababu, Programme Coordinator i/c	04868-247546	9446223170	kvksanthanpara@rediffmail.com

1.4. Year of sanction: 1994.**1.5. Staff Position (as 31st March 2011)**

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asst.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Vacant	Programme Coordinator	-	-	-	12000-375-18000	12000	-	-	-
2	SMS	Dr. S. Jayababu	Subject Matter Specialist	M	Animal Science	B.V. Sc. in Animal Husbandry	8000-275-13500	8000	19-06-1995	Permanent	Others
3	SMS	Manju Jincy Varghese	Subject Matter Specialist	F	Soil Science	M.Sc. Agriculture (Soil Science)	8000-275-13500	8000	10-01-2011	Permanent	Others
4	SMS	Dr. Benjamin Mathew	Subject Matter Specialist	M	Agri. Extension	Ph.D. Horticulture	8000-275-13500	8000	17-01-2011	Permanent	Others
5	SMS	Pramod Chacko	Subject Matter Specialist	M	Agronomy	M.Sc. Agriculture (Agronomy)	8000-275-13500	8000	17-01-2011	Permanent	Others
6	SMS	Binu John Sam	Subject Matter Specialist	M	Horticulture	M.Sc. Horticulture	8000-275-13500	8000	17-01-2011	Permanent	Others
7	SMS	Sudhakar Soundarajan	Subject Matter Specialist	M	Plant Protection	M.Sc. Agricultural Entomology	8000-275-13500	8000	27-01-2011	Permanent	OBC
8	Programme Assistant (Lab Tech.)/T-4	Jayisy Joseph	Programme Assistant	F	Home Science	M. Sc. Home Science (Extension for Rural Development)	5500-175-9000	7950	20-06-1995	Permanent	Others
9	Programme Assistant (Computer)/ T-4	Biju Narayanan	Programme Assistant	M	Computer Application	M.C.A., PGDCA	5500-175-9000	5850	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)	5500-175-9000	7775	05-06-1995	Permanent	Others

11	Assistant	Shaji. K. Kakkattu	Assistant	M	-	-	5500-175-9000	7775	05-06-1995	Permanent	Others
12	Jr. Stenographer	Daisy Daniel	Jr. Stenographer	F	-	-	3050-80-4590	4110	05-06-1995	Permanent	Others
13	Driver	P. Nandagopal	Driver	M	-	-	3050-80-4590	4110	05-06-1995	Permanent	OBC
14	Auxiliary Staff	K.T. Mathew	Peon/Messenger	M	-	-	2550-55-3200	3260	05-06-1995	Permanent	Others
15	Supporting staff-1	K.O. Jose	F.F. Attendant	M	-	-	2550-55-3200	3260	05-06-1995	Permanent	Others
16	Supporting staff-2	P. Sabu	F.F. Attendant	M	-	-	2550-55-3200	3260	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	-	-	-	-	-	-
4.	Demonstration Units		-	-	-	-	-	-
	1. Duck cum fish culture unit.	RF	15-06-2009	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	-	-	-
5	Fencing	NA	-	-	-	-	-	-
6	Rain Water harvesting system	NA	-	-	-	-	-	-
7	Threshing floor	NA	-	-	-	-	-	-
8	Farm godown	NA	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tempo Trax	July - 1995	3,06,676.34	135329	Very poor condition and needs immediate replacement.
Motor Bike (Suzuki Shogun)	January - 1995	37,972.78	8743	In running condition with poor fuel efficiency.
Honda Aviator	March - 2009	50,000.00	3443	Good condition.

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
A.V. aids (Specify)			
Television	1995	20,894.00	Bad
GE OHP	1996	7,100.00	Good
2ET Slide Projector	1996	11,556.00	Bad
Sharp Video Player	1996	10,000.00	Bad
Pentax SLR Camera	1996	13,599.15	Bad
Public Address System	2003	26,755.00	Good
Power Generator	2003	32,492.00	Good
LCD Projector (EPSON – EBW8)	2010	55,186.00	Good
Liberty Show Juno 5 x 7 (MW) Screen	2010	5,885.00	Good
Soil Science Lab Equipments (Specify)			
KEMI HOT PLATE with Energy Regulator	2006	5,400.00	Bad
Electronic Balance	2006	1,00,000.00	Good
Physical Balance	2006	8,991.00	Good
Spectrophotometer	2006	1,17,499.00	Under use but needs repair
Electronic Automatic KEL PLUS model KES 12L (Nitrogen Analyzer)	2006	97,043.00	Under use but needs repair
Conductivity Meter (PH Meter Utech 510)	2006	21,935.00	Under use but needs repair
HOT AIR OVEN	2006	13,725.00	Good
Water bath WDB2 350 x 400 100mm Size 12	2006	41,895.00	Good
Flame Photometer	2006	45,000.00	Under use but needs repair
Conductivity Meter	2006	13,500.00	Bad and required new
LG 280 Litre Fridge Model – GI 296 TM V-Guard Stabilizer	2006	250.00	Good
Mixer grinder 750 Watts	2006	4,500.00	Bad and required new
Online UPS System with Battery	2006	36,916.00	Needs repair
Fume Cupboard KEMI	2006	2,68,192.00	Good
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	Bad and required new
Auto Clave	2000	19,000.00	Bad and required new
Step up Stabilizer	2008	4,595.00	Good
Other Equipments			
FACIT Typewriter (Malayalam)	1995	9,735.00	Bad
FACIT Typewriter (English)	1995	9429.00	Bad
Stencil Duplicator	1995	13,700.00	Bad
Computer with Printer	2003	49,750.00	Bad
Photostat Machine	2003	80,000.00	Good
Brush Cutter	2009	23,726.00	Good
Fax Machine	2009	15,000.00	Good
Laptop Computer (DELL Studio 14 N)	2010	37,150.00	Good
Inkjet Printer (Epson TX 111 AIO)	2010	1,779.00	Good

Sl. No	Date planned for conducting SAC meeting during 2011-12
01	13/07/2011
02	11/01/2012

1.8. Details SAC meeting conducted in 2010-11

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	28/07/2010	21	20	<p>A) Suggestion by Dr. S. Prabhukumar, Zonal Project Director, Zonal Project Directorate, Zone- VIII, ICAR, MRS, HA Farm Post, Hebbal, Bangalore – 560 024: -</p> <ul style="list-style-type: none"> ✓ Presentations should be done in Malayalam. ✓ Next SAC Meeting is fixed on 28th January 2011. ✓ KVK should bring out an Organic Package for Pepper encompassing nutrient, pest and disease management aspects. ✓ Action Taken Report should be presented with quantified data. ✓ Photographs in presentation should correspond to the specific activities undertaken by the KVK and it should highlight the salient achievements of the activities. ✓ KVK may approach National Horticulture Mission / Department of Agriculture for the purchase of Atomic Absorption Spectrometer for Soil Testing Laboratory. ✓ SAC Members must be invited to FLD plots and other major activities of the KVK. ✓ KVK must organize <i>Training on Precision Farming</i> inviting experts from TNAU, Coimbatore. ✓ KVK can take up <i>Training on Banana Fibre Extraction</i> with a model unit at KVK. ✓ Banana Nutrient Mix or other such technologies may be purchased from IIHR, Bangalore. ✓ Footprints of farmers visiting KVK must be recorded. ✓ Hatchery units for poultry birds must be established in KVK, before popularizing new varieties in poultry. Further spread of technology may be taken up through SHG's. ✓ Nandanam Beltsville Turkey from Poultry Research Station, Nandanam may be popularized under backyard management. ✓ CO-4 variety of fodder must be popularized with low cost chaff cutter developed by Namakkal KVK among farmers. ✓ Home Scientist must associate with OFT's & FLD's in Agriculture disciplines to find out nutritional aspects of various varieties etc. introduced. ✓ Soil Health Card must be maintained along with soil analysis for farmers at KVK. ✓ Up scaling of technologies should be done by KVK. ✓ Commercial production of Pseudomonas and Trichoderma may be taken up. 	<ul style="list-style-type: none"> • Forthcoming SAC's presentation will be done in Malayalam. • Preparation of organic package for pepper is in progress. • Training on Precision farming was conducted on 03/12/2010. • This year, we are conducting a FLD based on Banana Nutrient Mix, IIHR, Bangalore. • We are maintaining a Register of farmers visiting KVK. • We are maintaining the Soil Analysis Record of farmers. • This year, we are proposing FLD on low cost incubator for establishing hatchery unit. • We are going to propose a FLD on Nandanam Beltsville Turkey from Poultry Research Station, Nandanam, next year. • This year, we proposed a FLD on low cost chaff cutter, but not sanctioned. • Commercial production of Pseudomonas & Trichoderma has started in the KVK.

			<p>B) Suggestion by Sri. K. K. Chandran, Principal Agricultural Officer, Department of Agriculture: -</p> <ul style="list-style-type: none"> ✓ KVK should take up commercial production of Vermicompost. ✓ Work may be initiated to identify suitable varieties for upland rice cultivation. ✓ KVK may take up Technology Assessment and Refinement management of Locust problem. It can be supported by ATMA. ✓ System Rice Intensification in Paddy using UMA variety may be taken up by KVK. <p>C) Suggestion by Dr. S. Varadarajan, Scientist, Indian Cardamom Research Institute, Spices Board, Myladumpara, Idukki: -</p> <ul style="list-style-type: none"> ✓ Instead of FYM, more thrust may be taken up for composting while implementing OFT's and FLD's. ✓ KVK may take up IPM Package developed by ICRI for demonstrations. ✓ Bio-control agents like Metarhizium, EPN may be taken by KVK. Training for production and multiplication of bio-control agents can be arranged at ICRI for KVK Staff. OFT may also be initiated in this line. ✓ Locust problem identified in localized pockets in different parts of the district. Presently it has not reached an alarming level by causing economic damage to crops. Metarhizium is a good bio-control measure against locust attack. <p>D) Suggestion by Sri. G. S. Iyer, District Development Manager, NABARD, Thodupuzha: -</p> <p>Submit schemes for popularizing successful technologies identified by KVK for Idukki District. KVK may organize extension activities based on technologies with assistance from NABARD. NABARD offered assistance for documentation of success stories of KVK.</p> <p>E) Suggestion by Smt. Bindhu Chandran, Manager, Project Area, VFPCCK: -</p> <ul style="list-style-type: none"> ✓ Farmer – Scientist interaction must be organized by KVK for dissemination of technologies identified by KVK. ✓ Successful technologies related to Vegetables and Banana may be passed on to VFPCCK. ✓ Effective micro-organisms technology for Composting, Pest and Disease Management may be taken up by KVK. 	<ul style="list-style-type: none"> • Production of vermicompost & sale of earthworms are doing in large scale. • Next year, we are planning to conduct a FLD on SRI in paddy using UMA variety. • Next year, we are planning to conduct a FLD on IPM Package developed from ICRI. • We are popularising the Metarhizium as a good bio-control measure against locust attack through our farmers training programmes & field visits. • This year, we are approaching NABARD for getting assistance for various activities. • We are maintaining a good rapport with VFPCCK with dissemination of new technologies in vegetables & banana.
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				<ul style="list-style-type: none"> ✓ More thrust may be given for vegetable cultivation. ✓ Precision farming training may be combined with VFPCCK. <p>F) Suggestion by Dr. Rajeswari, Assistant Director, Animal Husbandry Department: -</p> <ul style="list-style-type: none"> ✓ In OFT for scientific rearing of heifer calves, feeding along with deworming medicines should be done through <i>pyrental palmoate</i> (Placental Transmission) for attaining early body weight. ✓ Silage promotion should be given adequate thrust. <p>G) Suggestion by Sri. K. M. Michael, President, Cardamom Growers Association: -</p> <ul style="list-style-type: none"> ✓ Production of bio-control agents like AM Fungi, Pseudomonas & Trichoderma should be improved. ✓ KVK must take up micronutrient analysis for the benefit of farmers. <p>H) Suggestion by Sri. K. K. Devassia, Cardamom Growers Association: -</p> <ul style="list-style-type: none"> ✓ Organic inputs must be certified for purity and quality by KVK and other line departments. ✓ Dwarf variety of Banana must be identified and popularized by KVK. <p>I) Suggestion by Sri. Baby Thevarkattu, Progressive Farmer: -</p> <ul style="list-style-type: none"> ✓ KVK may take up FLD on IPM & INM practices in Cardamom. ✓ Studies on the effect of nutraceuticals in Cardamom may be taken up by KVK. ✓ Dissemination of technologies identified by KVK should be given more thrust. ✓ Bio-control production must be increased. 	<ul style="list-style-type: none"> • We are doing various trainings for silage promotions.
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PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1	Cardamom and Pepper based farming system in the High Ranges of the District
2	Paddy belts in specific locations
3	Homestead based farming
4	Tea plantation
5	Cool season vegetables
6	Dairying
7	Banana cropping
8	Rubber mono-crop

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	<i>Malayoram</i>
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	-
2.	Cheenikuzhy series	Fine loamy texture.	-
3.	Thommankuthu series	Clayey texture.	-
4.	Venmani series	Clayey texture.	-
5.	Marayoor series	Clay loam to clayey texture.	-
6.	Pampadumpara series	Clayey texture.	-

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

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1.	Cardamom	33078	7827	237
2.	Pepper	58290	16708	287
3.	Banana	2705	23662	8748
4.	Rice	2115	5494	2598
5.	Coconut	17776	79 million nuts	4444194
6.	Tapioca	7706	255284	33128
7.	Coffee	12680	7815	616
8.	Tea	24412	36952	1514

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

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2010	18.9(2)	25.19	16.34	97.2
May 2010	0	27.75	16.5	95.2
June 2010	12.8(1)	30.35	17.6	94.4
July 2010	98.6(6)	30.01	19.37	94.3
August 2010	82(6)	29.21	19.54	96.40
September 2010	286.0(15)	25.8	18.3	98.8
October 2010	419(23)	23.8	17.4	98.3
November 2010	260.4(17)	24.2	17.6	99.2
December 2010	159.4(12)	25.8	16.8	97.8
January 2011	-	25.3	14.87	96.93
February 2011	107.4(3)	26.9	15.3	87.6
March 2011	22.2(3)	28.6	16.2	85

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

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	143247	Milk – 25.01 Lakh MT	-
<i>Indigenous</i>	23431	-	-
Buffalo	4348	-	-
Sheep			
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	161	-	-
Goats	84790	Meat – 80 T	-
Pigs			
<i>Crossbred</i>	22914	41.00 T	-
<i>Indigenous</i>	-	-	-
Rabbits	38367	6300 Kg	-
Poultry			
Hens	413099	161.05 Billions	-
<i>Desi</i>	5000		
<i>Improved</i>	-		
Ducks	11114	96000	-
Turkey and others	31486	14.00 (000)	-

Category	Area	Production	Productivity
Fish	More than 5 Lakhs	598 MT	-
<i>Marine</i>	-	-	-
<i>Inland</i>	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

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

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

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 , Kattappana	Anakkara, Anavilasom, Ayyappankoil, Chakkupallom, Chathurangappara, Chinnakanal, Kalkoonthal, Kanthippara, Karunapuram, Kattappana, Konnathady, Pampadumpara, Parathodu, Pooppara, Pottankadu (Bison Valley), Rajakkad, Rajakumary, Santhanpara, Thankamany, Udumbanchola, Upputhodu, Vathikudy & Vandanmedu	1995 onwards	Cardamom, Pepper, Ginger, Banana, Vegetables, Rice. Dairy cattle, goat, quail & poultry.	1) Unscientific crop management practices. 2) Use of local varieties of crops with poor yield potential. 3) Heavy pest & disease incidence in crops. 4) Infertility problem in dairy cows. 5) Diseases like Mastitis, Ecto and Endo parasite etc. in dairy cows. 6) Low productivity in poultry.	1) Productivity improvement of major crops. 2) Introduction of high yielding improved crop varieties, livestock and poultry breeds. 3) Integrated Pest and Disease Management (IPDM) in major crops. 4) Scientific management of livestock & poultry. 5) Self-employment and Income generation of rural youth & women. 6) Value addition of farm produce.
2	Peermedu	Azhutha	Elappara, Kokkayar, Kumily, Manjumala, Mlappara, Peerumedu, Periyar, Peruvanthanam, Upputhara & Vagamom	1995 onwards	Tea, Coffee, Cardamom. Dairy cattle, goat, poultry & piggery.	1) Unscientific crop management. 2) Heavy pest & disease incidence in crops. 3) Infertility problem in dairy animals. 4) Mastitis. 5) Ecto and endo parasitic infestation.	1) Productivity improvement of major crops. 2) IPDM in major crops. 3) Scientific management of livestock & poultry.

3	Devikulam	Devikulam, Adimali	Anaviratty, Kannan Devan Hills, Kanthalloor, Keezhanthoor, Kottakomboor, Kunjithanny, Mankulam, Mannamkandam, Marayoor, Pallivasal, Vattavada & Vellathooval	1995 onwards	Cardamom, Pepper, Tea, Rice. Dairy cattle, goat, poultry & piggery.	1) Unscientific crop management practices. 2) Heavy pest & disease incidence in crops. 3) Mastitis and ecto & endo parasitic infestation. 4) Poor growth rate and body weight gain in dairy calves. 5) Lack of entrepreneurship among rural youth and women.	1) Productivity improvement of major crops. 2) Integrated Pest and Disease Management (IPDM) in major crops. 3) Scientific management of livestock & poultry. 4) Self-employment and Income generation of rural youth & women.
4	Thodupuzha	Thodupuzha, Elamdesom & Idukki	Alakkodu, Arakkulam, Elappally, Idukki, Kanjikkuzhy, Karikkodu, Karimannoor, Karimkulam, Kodikkulam, Kodayathoor, Kumaramangalam, Manakkad, Muttom, Neyyasserry, Purappuzha, Thodupuzha, Udumbannoor, Vannapuram & Velliyamattam	1995 onwards	Rubber, Coffee, Coconut, Vegetables, Tree spices, Tapioca, Rice. Dairy cattle, goat, poultry, piggery & turkey.	1) Unscientific crop management practices. 2) Lack of entrepreneurship among rural youth and women. 3) Mastitis and infertility problem in dairy animals.	1) Productivity improvement of major crops. 2) Self-employment and Income generation of rural youth & women. 3) Scientific management of livestock & poultry.

2.9 Priority thrust areas

S. No.	Thrust area
1.	Productivity improvement of major crops
2.	Mechanization in paddy farming
3.	Introduction of high yielding improved crop varieties, livestock and poultry breeds
4.	Integrated Pest and Disease Management (IPDM) in major crops
5.	Self-employment and Income generation of rural youth & women
6.	Value addition of farm produce
7.	Scientific management of livestock and poultry
8.	Drudgery reduction.

PART III - TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	6	39	34	8	8	95	118

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
130	117	2000	1733	300	201	2500	1037

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
800 Packets	Vegetable seeds - 752 Packets	2000 Nos.	2185 Nos.

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
100	-	Mushroom spawn – 1327 packets	Mushroom spawn – 1327 packets
		Pseudomonas – 351.63 Litre	Pseudomonas – 351.63 Litre
		Trichoderma – 67 Litre	Trichoderma – 67 Litre
		Earthworm – 50 Kg	Earthworm – 40 Kg

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.) / Other inputs	Supply of livestock (No.)	Supply of bio products	
											No.	Kg		
1	Productivity improvement	cardamom	Huge pest/disease infestation	-	ICM in cardamom	2	-	-	4	-	Neem cake -50 kg Urea – 850 kg Rajphos – 2100 kg MOP – 1250 kg CuSO4-30 kg ZnSO4-25 kg Borax-50 kg Quick lime-30 kg	-	-	Trichoderma- 30 L
2	Productivity improvement	Pepper	Low yield	To assess the efficiency of consortium bio fertilizers in improving productivity of black pepper.	-	1	-	-	5	-	Neem cake-500 kg Urea – 54 kg Rajphos – 138 kg MOP – 125 kg	-	-	Azospirillum-13 kg Phosphobacterium -13 kg VAM-55 kg Farm yard manure-1630 kg

3	Improving the productivity of major crops.	Banana	Low yield & untapped yield potential	Nutrient Management of Nendran Banana under the agro-climatic conditions of High Ranges of Idukki	-	3	2	-	6	-	Urea – 102 kg Rajphos – 166 kg MOP – 146 kg Lime – 50 kg	-	-	-
4	Mechanization	Paddy	Labour scarcity	-	Mechanized paddy farming	2	2	-	5	-	Urea – 750 kgs Rajphos – 1050 kgs MOP – 350 kgs	-	-	Pseudomonas – 38.5 L
5	Nutrient Management		Low productivity	-	INM in paddy	3	1	-	4	-	Neem cake -200 kgs Urea – 1000 kgs Rajphos – 1250 kgs MOP – 400 kgs Lime – 77 kgs	-	-	Pseudomonas – 55.5 L
6	Increasing productivity	Sweet potato	Non-availability of high yielding varieties	-	Demonstration of Gouri variety sweet potato	1	2	-	8	-	4000 Nos.	-	-	-
7	Drudgery reduction	Pepper	1) Price fluctuation 2) Traditional method of white pepper making is time consuming	-	Mechanized white pepper production	2	-	-	18	-	-	-	-	-
8	Increase in productivity	Turmeric	Non-availability of high yielding varieties of seed rhizomes	Assessing the suitability of turmeric varieties Pratibha, Sobha and Varna under high range conditions.	-	2	1	-	4	-	31.6 kg Pratibha turmeric seed 60 kg Sobha turmeric seed. 150 kg Varna turmeric seed	-	-	-
9	IPDM	Bitter gourd	Unscientific crop management	-	Integrated management of yellowing in bitter gourd	2	-	-	2	-	Mancozeb - 3kg Econeam plus – 8L Imidachlorprid - 1L	-	-	Pseudomonas - 50L
10	Breeding improvement	Dairy cattle	Infertility problem	Synchronization of estrus in dairy cows	-	5	2	-	3	-	-	-	-	-

11	Production & improvement of poultry	Quail	Low egg production	Assessing the performance of Nandanam variety of quail under High Ranges of Idukki	-	4	1	-	1	-	-	125 birds	-	-
12	Production & improvement of poultry	Poultry	Low egg production	Assessing the performance of Gramasree, Gramalakshmi & Rhodo white varieties under High Range condition	-	4	2	-	1	-	-	150 birds	-	-
13	Disease management	Dairy cattle	Mastitis & low milk production	-	Prophylactic management of mastitis in dairy cows using antiseptic solution in teat cups	5	1	-	3	-	-	-	-	-
14	Disease management	Dairy calves	Ecto & endo parasitic infestation	-	Management of ecto & endo parasitic infestation in dairy calves	3	2	-	1	-	-	-	-	-

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.	Effect of consortium bio fertilizers on the productivity of black pepper	KAU	Pepper	1	-	1	Field visits – 2 FAS - 3
2.	Mechanization in paddy farming	KAU	Rice	-	1	4	Field visits – 2 Demonstrations – 3
3.	INM in paddy	KAU	Rice		1	4	Field visits – 2 FAS - 2
4.	ICM in cardamom	KAU	Cardamom		1	2	Field visits – 2 FAS - 2
5.	Integrated management of yellowing in bitter gourd	KAU	Bittergourd	-	1	2	Field visits – 5 Demonstration - 5
6.	Demonstration of Gouri variety sweet potato	CTCRI	Sweet potato	0	1	2	FAS-8
7.	Mechanized white pepper production		Pepper	0	1	2	Demonstration-10, FAS-13
8.	Assessing the suitability of turmeric varieties Pratibha, Sobha and Varna under high range conditions	IISR & KAU	Turmeric	1	0	1	FAS-6
9.	Synchronization of estrus in dairy cows	TANUVAS	Dairy cattle	1	0	7	Field visit-3
10.	Assessing the performance of Nandanam variety of quail under High Ranges of Idukki	TANUVAS	Japanese quail	1	0	5	Field visit-1
11.	Assessing the performance of Gramasree, Gramalakshmi & Rhodo white varieties under High Range condition	KAU & TANUVAS	Poultry	1	0	6	Field visit-1
12.	Prophylactic management of mastitis in dairy cows using antiseptic solution in teat cups	KAU	Dairy cattle	0	1	6	Field visit-3
13.	Management of ecto & endo parasitic infestation in dairy calves	KAU	Dairy calves	0	1	5	Field visit-1

3.B2 contd..

No. of farmers covered																
OFT					FLD				Training				Others (Specify)			
General			SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
S. No	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1.	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
2.	0	0	0	0	6	1	4	2	6	1	4	2	0	0	0	0
3.	0	0	0	0	14	11	5	1	14	11	5	1	0	0	0	0
4.	0	0	0	0	8	5	4	3	8	5	4	3	0	0	0	0
5.	0	0	0	0	3	2	0	0	3	2	3	5	0	0	0	0
6.	0	0	0	0	0	4	0	0	2	11	0	0	0	0	0	0
7.	0	0	0	0	5	5	0	0	30	20	0	0	0	0	0	0
8.	4	0	0	0	0	0	0	0	3	18	0	0	0	0	0	0
9.	10	0	0	0	0	0	0	0	140	23	5	2	0	0	0	0
10.	3	2	0	0	0	0	0	0	110	22	2	1	0	0	0	0
11.	5	5	0	0	0	0	0	0	88	11	2	0	0	0	0	0
12.	0	0	0	0	14	6	0	0	132	10	1	1	0	0	0	0
13.	0	0	0	0	7	3	0	0	161	14	3	1	0	0	0	0

PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management				1				1		2
Varietal Evaluation	-	-	-	1	-	-	-	-	-	1
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				2						3

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management						1				1
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						1				1

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

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

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises: Nil**4.B. Achievements on technologies Assessed and Refined****4.B.1. Technologies Assessed under various Crops**

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management	Pepper	Efficacy of consortium bio-fertilizers in improving productivity in black pepper	5	5	1.8
Varietal Evaluation	Turmeric	Assessing the suitability of turmeric varieties Pratibha, Sobha & Varna under high range conditions	4	4	0.24
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.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology refined	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management	Banana	Nutrient Management of Nendran Banana under the agro-climatic conditions of High Ranges of Idukki	5	5	0.3
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			5	5	0.3

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	Poultry	Assessing the performance of Gramasree, Gramalakshmi & Rhodo white under high range conditions	10	10
Nutrition management				
Disease management	Dairy cattle	Synchronization of estrus in dairy cows	10	10
Value addition				
Production and management	Quail	Assessing the performance of Nandanam variety of quail under High Ranges of Idukki	5	5
Feed and fodder				
Small scale income generating enterprises				
Total			25	25

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

4.C1. Results of Technologies Assessed

Results of On Farm Trial

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Pepper	Pepper Based Farming system	Low productivity	Efficiency of consortium bio-fertilizers application in rejuvenating Black Pepper gardens	5	Effect of consortium bio-fertilizers on the productivity of black pepper	Yield Soil fertility	Consortium bio fertilizers- 2.78 t/ha Chemical fertilizer application - 2.85 t/ha Farmers practice - 2.1 t/ha	Organically managed plots gave 32 % increase in productivity over farmers practice	Organic practices increased yield, reduced berry shedding and increased pest/disease tolerance.	-	-
Turmeric	Intercropping	Lack of quality planting material	Assessing the suitability of turmeric varieties Pratibha, Sobha & Varna under high range conditions	4	Suitability of turmeric varieties	Yield & BCR	Pratibha, Sobha & Varna varieties of turmeric were assessed with local turmeric	Seed yield ratio:- 1) Pratibha-1:7 2) Shobha- 1:6 3) Varna- 1:5.5 4) Local check-1:4	Pratibha is highly recommended	-	-
Dairy cattle	Dairy farming is a major enterprise where infertility problem is more	Infertility problem	Synchronization of estrus in dairy cows	10	Synchronization of estrus in dairy cows	Conception rate & intercalving period	-	Out of 10 trial, 6 animals were conceived through this technology (60%)	Found very effective and chance to aware new technology	-	-
Poultry	Mixed farming	Low egg production	Assessing the performance of Gramasree, Gramalakshmi & Rhodo white under high range conditions	10	Assessing the performance of Gramasree, Gramalakshmi & Rhodo white under high range conditions	1) Growth rate. 2) Mortality rate. 3) Egg production. 4) BCR	-	Gramasree 1) Age at sexual maturity - 159 days. 2) Total egg production - 180 to 220 eggs. Gramalakshmi 1) Age at sexual maturity - 160 days. 2) Total egg production - 170 to 200 eggs. Rhodo white 1) Age at sexual maturity - 175 days. 2) Total egg production - 150 to 170 eggs.	Very good suitability for rural areas	-	-
Japanese Quail	Mixed farming	Low egg production	Assessing the performance of Nandanam variety of quail under high ranges of Idukki	5	Assessing the performance of Nandanam variety of quail under high ranges of Idukki	1) Egg production. 2) Average weight gain. 3) Disease incidence. 4) BCR	-	1) Age at sexual maturity - 7 th Week. 2) Total egg production - 200 to 220 eggs / bird / year.	Suitable for rural areas	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	2.1	t/ha	2,86759/-	2.32
Technology option 2	KAU	2.85	t/ha	4,36,174/-	2.76
Technology option 3	KAU	2.78	t/ha	4,36,335/-	2.89
Technology option 1 (Farmer's practice)	Local	126.4kg (3.95 t/ha)	t/ha	6,320/-	1:4
Technology option 2	IISR-Pratibha	221.2kg (6.91 t/ha)	t/ha	11,060/-	1:7
Technology option 3	KAU-Shobha	189.6kg (5.93 t/ha)	t/ha	9,480/-	1:6
Technology option 4	KAU-Varna	173.8kg (5.43 t/ha)	t/ha	8,690/-	1:5.5
Technology option 1 (Farmer's practice) A.I. during estrus period & high incidence of repeat breeding problem	-	-	-	-	-
Technology option 2 A.I. during 10-12 hours after the end of estrum	-	-	-	-	--
Technology option 3 Inducing Estrus for non-expressing animals by vaginal CIDR insert, removal of CIDR on 9 th day with <i>Lutalyse</i> injection (5 ml i/m) and A.I. at 48 to 72 hours.	TANUVAS	Out of 10 trials, 6 animals were conceived	-	Rs.4500/ unit	2.93
Technology option 1 (Farmer's practice) Growing of desi birds with poor production potential	-	-	-	-	-
Technology option 2 Assessing the performance of Gramasree variety	KAU	1) Age at sexual maturity – 159 days. 2) Total egg production – 180 to 220 eggs.	-	Rs.8000/ unit	3.67
Technology option 3 Assessing the performance of Gramalakshmi variety	KAU	1) Age at sexual maturity – 160 days. 2) Total egg production – 170 to 200 eggs.	-	Rs.6500/ unit	3.23
Technology option 4 Assessing the performance of Rhodo white variety	TANUVAS	1) Age at sexual maturity – 175 days. 2) Total egg production – 150 to 170 eggs.	-	Rs.5500/ unit	3.1
Technology option 1 (Farmer's practice) Growing of desi birds with poor production potential	-	-	-	-	-
Technology option 2 Nandanam variety with good production potential	TANUVAS	1) Age at sexual maturity – 7 th Week. 2) Total egg production – 200 to 220 eggs / bird / year.	-	Rs.3200/ unit	2.20

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

1)

- 1 Title of Technology Assessed: **Assessment on the efficacy of consortium bio fertilizers on the productivity of black pepper.**
- 2 Problem Definition: Low productivity in black pepper.
- 3 Details of technologies selected for assessment: Application of Neem cake @ 1 kg/plant + 10 kg FYM + consortium bio fertilizers i.e. Azospirillum and phosphor bacteria @ 25 g/plant and AMF @ 110 g/plant.
- 4 Source of technology: KAU
- 5 Production system and thematic area: Pepper based cropping system, Integrated Nutrient Management.
- 6 Performance of the Technology with performance indicators: The yield recorded after three years of trial indicated the following results. Yield recorded in farmers practice was 2.1 t/ha with the BCR of 2.32, the yield recorded under chemical fertilizer application was 2.85 t/ha with the BCR of 2.76 and the pepper plants under organic management yielded 2.78 t/ha with the BCR of 2.89.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:- The pepper plants under organic management produced bold berries, have low percentage of berry shedding and the plants showed increased pest/disease tolerance.
- 8 Final recommendation for micro level situation: Front line demonstration on the application of consortium bio fertilizers in black pepper for improving the productivity is conducted in the year 2011 – 2012.
- 9 Constraints identified and feedback for research: Consortium fertilizers show significant results on the productivity of black pepper only if the technology is continuously practiced for three years and the lack of enough moisture/organic matter in the field results in poor multiplication of bio fertilizers.
- 10 Process of farmer's participation and their reaction: The pepper grower's society in the locality had adopted the technology & more than 100 farmers are practicing the technology in over 40 ha area.

2)

- 1 Title of Technology Assessed: **On Farm Trial to assess the suitability of Turmeric varieties for High Ranges of Idukki District.**
- 2 Problem Definition: Local varieties of turmeric have low yield potential. Turmeric high yielding varieties were proposed to assess the suitability of this crop for high ranges of Idukki district.
- 3 Details of technologies selected for assessment:

Technology Option 1: Local varieties of turmeric are cultivated by the farmers. Organic farming adopted in turmeric cultivation. Yield potential is 3.6 t/ha [Dry].

Technology Option 2: Assessment of turmeric variety Pratibha having an yield potential of 7.82 t/ha [Dry] (Institute of Spices Research, Kozhikode).

Technology Option 3: Assessment of turmeric Sobha variety having an yield potential of 6.50 t/ha [Dry] (Kerala Agricultural University, Thrissur). High yielding, good color and especially suited for high range conditions.

Technology Option 4: Assessment of turmeric Varna variety having an yield potential of 4.2 t/ha [Dry] (Kerala Agricultural University, Thrissur).
- 4 Source of technology: IISR & KAU.
- 5 Production system and thematic area: Mono-cropping. Introduction of high yielding improved crop varieties.
- 6 Performance of the Technology with performance indicators

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques: Seed yield ratio: – Pratibha variety-1:7, Sobha-1:6, Varna-1:5.5, Local check-1:4 .
- 8 Final recommendation for micro level situation: Pratibha is highly recommended.
- 9 Constraints identified and feedback for research: Delay in obtaining quality turmeric rhizomes.
- 10 Process of farmer's participation and their reaction: Farmers showed interest in cultivating the selected turmeric high yielding variety – Pratibha in their fields.

3)

- 1 Title of Technology Assessed: **Synchronization of estrus in dairy cows.**
- 2 Problem Definition: Infertility in dairy cows.
- 3 Details of technologies selected for assessment: Synchronization of estrus in dairy cows.
- 4 Source of technology: TANUVAS.
- 5 Production system and thematic area: Mixed farming.
- 6 Performance of the Technology with performance indicators: Out of 10 trials, 6 animals were conceived.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Nil.
- 8 Final recommendation for micro level situation: New scientific breeding technology assessed is very much useful for farmers and make new technology awareness among farmers.
- 9 Constraints identified and feedback for research: Lack of awareness, negligence and improper managerial practices.
- 10 Process of farmer's participation and their reaction: Farmers are thoroughly convinced about the new scientific breeding technology and follow in future also.

4)

- 1 Title of Technology Assessed: **Assessing the performance of Gramasree, Gramalakshmi & Rhodo white under high range conditions.**
- 2 Problem Definition: Low egg production.
- 3 Details of technologies selected for assessment: Assessing the performance of Gramasree, Gramalakshmi & Rhodo white under high range conditions.
- 4 Source of technology: KAU & TANUVAS.
- 5 Production system and thematic area: Mixed farming and egg production.
- 6 Performance of the Technology with performance indicators:
Gramasree: - 1) Age at sexual maturity – 159 days. 2) Total egg production – 180 to 220 eggs.
Gramalakshmi: - 1) Age at sexual maturity – 160 days. 2) Total egg production – 170 to 200 eggs.
Rhodo white: - 1) Age at sexual maturity – 175 days. 2) Total egg production – 150 to 170 eggs.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques: Nil.
- 8 Final recommendation for micro level situation: Introduction and popularization of different variety released by different universities perform well and improves the financial status among farmers.
- 9 Constraints identified and feedback for research: Lack of awareness.
- 10 Process of farmer's participation and their reaction: Farmers are thoroughly convinced about the new variety of poultry with good production potential.

5)

- 1 Title of Technology Assessed: **Assessing the performance of Nandanam variety of quail under High Ranges of Idukki.**
- 2 Problem Definition: Low egg production.

- 3 Details of technologies selected for assessment: Assessing the performance of Nandanam variety of quail under High Ranges of Idukki.
- 4 Source of technology: TANUVAS.
- 5 Production system and thematic area: Mixed farming and egg production.
- 6 Performance of the Technology with performance indicators: 1) Age at sexual maturity – 7th Week 2) Total egg production – 200 to 220 eggs / bird / year.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Nil.
- 8 Final recommendation for micro level situation: Introduction and popularization of different variety released by different universities perform well and improves the financial status among farmers.
- 9 Constraints identified and feedback for research: Lack of awareness.
- 10 Process of farmer's participation and their reaction; Farmers are thoroughly convinced about the new variety of quail with good production potential.

4.D1. Results of Technologies Refined

Results of On Farm Trial

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11
Banana	Irrigated	Low yield and untapped yield potential	Nutrient Management of Nendran Banana under the agro-climatic conditions of High Ranges of Idukki	5	Nutritional management	Stages of fertilizer application	1) Vegetative growth. 2) Days for bunch emergence. 3) Yield.	On going	-	-

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology Option 1 9 to 10 splits of fertilizer application. The quantity of fertilizer applied varies from farmer to farmer.	Farmers practice	Ongoing	-	-	-
Technology Option 2 190:115:300 g / plant / year in 6 splits. The recommended practice is not being adopted since the farmers are not convinced about the sufficiency of fertilizers for the crop.	KAU	Ongoing	-	-	-
Technology Option 3 NPK @ 240:145:375 g / plant in 9 splits	Farmers Innovation	Ongoing	-	-	-

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

1. Title of Technology refined: **Nutrient Management of Nendran Banana under the agro-climatic conditions of High Ranges of Idukki.**
2. Problem Definition: Low yield and untapped yield potential.
3. Details of technologies selected for refinement: In the High Ranges of Idukki district, Nendran banana is of 13 months duration. The fertilizer application schedule which is standardized for Nendran banana grown in plains, which is of 10 months duration, is not sufficient in the High Range condition. At least 9 splits of fertilizer application is required since bunch emergence takes place only by the 10th month.
4. Source of technology: Farmers innovation.
5. Production system and thematic area: Improving the productivity of major crops.
6. Performance of the Technology with performance indicators: Ongoing.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques: Ongoing.
8. Final recommendation for micro level situation: Ongoing.
9. Constraints identified and feedback for research: Ongoing.
10. Process of farmers participation and their reaction: Ongoing.

PART V - FRONTLINE DEMONSTRATIONS

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
	Oilseeds													
	Pulses													
	Cereals	Paddy belts	Kharif	Rice	Uma	KAU released	Labour scarcity	Mechanization In paddy	5	5	4	9	13	Small holdings
		Paddy belts	Kharif	Rice	Uma	KAU released	Low productivity	INM	5	5	7	13	20	-
	Millets													
	Vegetables													
	Bitter gourd	Mono cropping	2010-11	Bitter gourd	Local	-	IPDM	Integrated management of yellowing in bitter gourd	1	1	3	2	5	-
	Flowers													
	Ornamental													
	Fruit													
	Spices and condiments	Cardamom belts	2010-11	Cardamom	Njallani	Farmer developed	Improved Productivity	Integrated crop management	5	5	11	19	30	-
		Pepper based cropping system	Perennial crop		Pepper	Local	-	Drudgery reduction	Mechanized White pepper production	-	-	-	10	10
	Commercial													

Medicinal and aromatic														
Fodder														
Plantation														
Fibre														
Dairy cattle	Mixed farming	Throughout the year	Dairy cattle	Crossbred cattle	-	Milk production	Prophylactic management of mastitis in dairy cows using antiseptic solution in teat cups	20	50 animal	2	18	20	Nil	
Dairy calves	Mixed farming	Throughout the year	Dairy calves	Crossbred dairy calves	-	Growth performance	Management of ecto & endo parasitic infestation in dairy calves	10	10 animal	-	10	10	Nil	
Poultry														
Rabbitry														
Piggery														
Sheep and goat														
Duckery														
Common carps														
Mussels														
Ornamental fishes														
Oyster mushroom														
Button mushroom														
Vermicompost														
Sericulture														
Apiculture														
Implements														

Others (specify)	Mixed farming	-	Sweet potato	CTCRI	Gouri	Increase in productivity	Demonstration of Gouri variety sweet potato	-	0.24	-	4	4	-	

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
	Oilseeds												
	Pulses												
	Cereals	Paddy belts	Khariif	Rice	Uma	KAU released	Labour scarcity	Mechanization In paddy	Khariif	H	M	H	Rice
		Paddy belts	Khariif	Rice	Uma	KAU released	Low productivity	INM	Khariif	H	M	H	Rice
	Millets												
	Vegetables	Mono cropping	July and 2010	Bitter gourd	Local	-	Integrated Pest & Disease Management	Integrated Pest & Disease Management	January and 2011	M	H	H	Bitter gourd
	Flowers												
	Ornamental												
	Fruit												
	Spices and condiments	Cardamom belts	2010 - 11	Cardamom	Njallani	Farmer developed	Low productivity	Integrated crop management	2010 - 11	H	M	H	Cardamom
		Pepper monocropping	2010 - 11	Pepper	Panniyur	IISR	Low productivity	INM	2010 - 11	H	M	H	Pepper
	Commercial												
	Medicinal and aromatic												
	Fodder												
	Plantation												
	Fibre												

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)					% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check	Gross Cost		Gross Return	Net Return	**	Gross Cost	Gross Return	Net Return	**	
							H	L	A											
Oilseeds																				
Pulses																				
Cereals - Rice	Small scale mechanization in paddy farming	Uma	KAU	Rice based	13	5	32.8	30.00	31.4	28.7	9.41	32,088	43,960	11872	1.37	41,854	40,180	-1674	0.96	
	Integrated Nutrient Management	Uma	KAU	Rice based	20	5	29.5	28.7	29.1	28.7	1.4	35,120	40,740	5,620	1.16	41,854	40,180	-1674	0.96	
Millets																				
Vegetables	Integrated management of yellowing in bitter gourd	Local	-	Mono-cropping	5	1	20	10	16	12	30	16250	20320	7997	1:1.25	22450	20320	-2130	1:0.90	
Flowers																				
Ornamental																				
Fruit																				
Spices and condiments	Mechanized white pepper production	-	-	Mono-cropping	10 units	-	-	-	-	-	-	12600	28500	15900	2.26	-	-	-	-	
Cardamom	Integrated Crop Management in Cardamom	Njallani	-	Cardamom based cropping systems	15 units	5	0.96	0.88	0.92	0.81	13.6	392248	1012000	619752	2.58	403081	850500	447419	2.11	
Commercial																				
Medicinal and aromatic																				
Fodder																				
Plantation																				
Fibre																				
Others (pl. specify)	Demonstration of sweet potato	Gouri	CTCRI	Mixed cropping	4	0.24	-	-	-	-	-	20000	34000	14000	1.70	18000	23000	5000	1.27	

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

** BCR= GROSS RETURN/GROSS COST

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

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

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)			Check if any	% Increase	*Economics of demonstration Rs./unit				*Economics of check (Rs./unit)			
					Demo					Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	**
					H	L	A										
Dairy																	
Dairy cattle	Prophylactic management of mastitis in dairy cows using antiseptic solution in teat cups	Crossbred	20	50 animal	13 to 15 L / day	15 to 18 L / day	12 to 14 L / day	15 L	15%	4200	15000	12000	3.57	3600	9000	5400	2.50
Dairy calves	Management of ecto & endo parasitic infestation in dairy calves	Crossbred	10	10 animal	15 to 20 Kg	20 to 25 Kg	10 to 15 Kg	12 Kg	-	6000	13000	7000	2.16	1500	3200	1700	2.13
Poultry																	
Rabbitry																	
Piggery																	
Sheep and goat																	
Duckery																	
Others (pl. specify)																	

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

** BCR= GROSS RETURN/GROSS COST

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

5.B.3. Fisheries: Nil

5.B.4. Other enterprises: Nil

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

5.B.6. Cotton: Nil

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

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1.	Paddy	Mechanized paddy farming	Timely completion of cultural practices & reduced labour input.
2.	Paddy	Integrated Nutrient Management in Paddy	Increased productivity.
3.	Cardamom	Integrated Crop Management in Cardamom	Increased productivity & disease resistance.
4.	Bitter gourd	Integrated Management of yellowing in Bitter gourd	Increased yield by 30%.
5.	Pepper	Mechanized White Pepper production	Increased returns.
6.	Sweet Potato	Demonstration of Gouri variety of Sweet potato	Average performance of the variety in this region.
7.	Dairy cattle	Prophylactic management of mastitis in dairy cow using antiseptic solution in teat cups.	Very good result for prevention of mastitis disease.
8.	Dairy cattle	Management of ecto-endo parasitic infestation in dairy calves.	Easy oral administration.

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Mechanized paddy farming	A novel concept well accepted by farmers of that region which reduces labour input
2	Paddy	Integrated Nutrient Management in Paddy	Increased productivity
3	Cardamom	Integrated Crop Management in Cardamom	Increased productivity & disease resistance.
4	Bitter gourd	Integrated Management of yellowing in Bitter gourd	IPDM.
5	Pepper	Mechanized White Pepper production	Well accepted by farmers due to its increased returns
6	Sweet Potato	Demonstration of Gouri variety of Sweet potato	Farmers are less convinced on the performance of the new variety in this region
7	Dairy cattle	Prophylactic management of mastitis in dairy cow using antiseptic solution in teat cups.	Farmers are convinced on the efficacy of this technology for prevention of mastitis.
8	Dairy cattle	Management of ecto-endo parasitic infestation in dairy calves.	Farmers have expressed their willingness to adopt the technology.

5.B.6.8 Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days			
2	Farmers Training	11	162	-
3	Media coverage			
4	Training for extension functionaries			

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids: Nil

PART VII. TRAINING**7.A.. Farmers' Training including sponsored training programmes (On campus)**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management	1	0	5	5	0	0	0	0	5	5
Integrated Crop Management	2	18	1	19	8	3	11	26	4	30
Soil and Water Conservation	1	20	0	20	0	0	0	20	0	20
Integrated Nutrient Management	2	11	2	13	6	1	7	17	3	20
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	1	0	18	18	0	0	0	0	18	18
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	1	3	18	21	0	0	0	3	18	21
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	3	14	6	20	8	2	10	22	8	30
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	1	41	0	41	0	0	0	41	0	41

Integrated water management										
Integrated nutrient management										
Production and use of organic inputs	1	32	14	46	0	0	0	32	14	46
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl. specify)										
Livestock Production and Management										
Dairy Management	1	70	0	70	0	0	0	70	0	70
Poultry Management	1	9	14	23	0	0	0	9	14	23
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	3	18	21	0	0	0	3	18	21
Animal Disease Management	1	30	0	30	0	0	0	30	0	30
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	1	3	18	21	0	0	0	3	18	21
Minimization of nutrient loss in processing										
Processing and cooking	2	3	20	23	0	0	0	3	20	23
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	4	13	33	46	0	0	0	13	33	46
Women empowerment										
Location specific drudgery production										
Rural Crafts	2	2	4	6	0	0	0	2	4	6
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	26	10	36	4	0	4	30	10	40
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl. specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl. specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	6	9	34	43	0	11	11	9	45	54
Apiculture										
Others (pl. specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										

Entrepreneurial development of farmers/youths										
Others (pl. specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	27	282	206	488	4	11	44	286	217	503

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	2	50	3	53	5	2	7	55	5	60
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	2	40	0	40	4	0	4	44	0	44
Soil and Water Conservation	1	27	7	34	0	0	0	27	7	34
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	1	6	6	12	3	4	7	9	10	19
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	1	17	0	17	0	0	0	17	0	17
Integrated water management										
Integrated nutrient management	1	50	50	100	0	0	0	50	50	100
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing	1	0	18	18	0	0	0	0	18	18
Others (pl. specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management	1	20	13	33	10	10	20	30	23	53
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	4	12	4	16	0	0	0	12	4	16
Processing and cooking	2	9	29	38	4	19	23	13	48	61
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	4	1	25	26	0	0	0	1	25	26
Women empowerment										
Location specific drudgery production										
Rural Crafts	5	0	20	20	0	5	5	0	25	25
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	0	14	14	0	0	0	0	14	14
Integrated Disease Management	1	35	0	35	0	0	0	35	0	35
Bio-control of pests and diseases	1	44	0	44	0	0	0	44	0	44
Production of bio control agents and bio pesticides										
Others (pl. specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										

Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl. specify)										

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production	1	25	0	25	0	0	0	25	0	25
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	1	1	7	8	0	3	3	1	10	11
Apiculture	3	78	8	86	0	0	0	78	8	86
Others (pl. specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl. specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	33	415	204	619	26	43	69	441	247	688

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	1	12	19	31	1	1	2	13	20	33
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	2	40	36	76	1	1	2	41	37	78
Small scale processing										
Post Harvest Technology	1	0	25	25	0	1	1	0	26	26
Tailoring and Stitching	1	0	26	26	0	1	1	0	27	27
Rural Crafts	11	9	29	38	1	10	11	10	39	49
Production of quality animal products										
Dairying	3	61	43	104	0	20	20	61	63	124
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	19	122	178	300	3	34	37	125	212	337

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	17	24	41	3	1	4	20	25	45
Small scale processing										
Post Harvest Technology	2	0	15	15	0	0	0	0	15	15
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	3	17	39	56	3	1	4	20	40	60

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	1	31	43	74	0	1	1	31	44	75
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl. specify)										
Total	1	31	43	74	0	1	1	31	44	75

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

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

7.G. Sponsored training programmes

S. No..	Area of training	No. of Courses	No. of Participants									
			General			SC/ST			Grand Total			
			Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	Crop production and management											
1.a.	Increasing production and productivity of crops	3	72	78	150	4	0	4	76	78	154	
1.b.	Commercial production of vegetables	2	6	24	30	3	4	7	9	28	37	
2	Production and value addition											
2.a.	Fruit Plants	2	0	32	30	0	0	0	0	35	35	
2.b.	Ornamental plants											
2.c.	Spices crops	1	35	0	35	0	0	0	35	0	35	
3.	Soil health and fertility management	3	27	32	59	0	0	0	27	32	59	
4	Production of Inputs at site											
5	Methods of protective cultivation	3	36	60	96	4	0	4	40	60	100	
6	Others (Mushroom)	1	0	25	25	0	0	0	0	25	25	
7	Post harvest technology and value addition											
7.a.	Processing and value addition	3	53	34	87	4	19	23	57	53	110	
7.b.	Others (Apiculture)	3	58	68	126	0	0	0	58	68	126	
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	1	41	0	41	0	0	0	41	0	41	
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	2	4	31	35	0	0	0	4	31	35	
11.b.	Economic empowerment of women	1	3	18	21	0	0	0	3	18	21	
11.c.	Drudgery reduction of women	2	0	29	29	0	0	0	0	29	29	
11.d.	Others (Value addition)	1	13	35	48	0	0	0	13	35	48	
12	Agricultural Extension											
12.a.	Capacity Building and Group Dynamics											
12.b.	Others (IPM)	1	18	0	18	0	0	0	18	0	18	
	Total	29	336	466	832	15	23	38	381	489	870	

Details of sponsoring agencies involved:

1. Co-operative Bank.
2. ATMA.
3. Agricultural Department.
4. High Range Development Society.
5. Union Bank of India (RSETI).
6. Spices Board.
7. Coffee Board.

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

S. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.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	1	0	5	5	0	0	0	0	5	5
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	1	0	7	7	0	3	3	0	10	10
4.h.	Nursery, grafting etc.	1	0	5	5	0	0	0	0	5	5
4.i.	Tailoring, stitching, embroidery, dyeing etc.										
4.j.	Agri. para-workers, para-vet training										
4.k.	Others (Fabric and bouquet making)	2	0	35	35	0	15	15	0	50	50
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl. specify)										
	Grand Total	5	0	52	52	0	18	18	0	70	70

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including activities of FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	14	48	13	61	0	0	0	0	0	0
Kisan Mela										
Kisan Ghosthi										
Exhibition										
Film Show										
Method Demonstrations										
Farmers Seminar										
Workshop										
Group meetings										
Lectures delivered as resource persons										
Newspaper coverage										
Radio talks										
TV talks										
Popular articles										
Extension Literature										
Advisory Services	73	47	32	82	0	0	0	10	10	20
Scientific visit to farmers field	18	0	0	82	0	0	0	0	0	0
Farmers visit to KVK	95	326	409	735	0	0	0	31	25	56
Diagnostic visits	1	1	0	1	0	0	0	0	0	0
Exposure visits										
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns										
Farm Science Club										
Conveners meet										
Self Help Group										
Conveners meetings										
Mahila Mandals										
Conveners meetings										
Celebration of important days (specify)										
Any Other (Specify)										
Total	201	422	454	961	0	0	0	41	35	76

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS**9.A. Production of seeds by the KVKs**

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Vegetables	Capsicum	INDAM Mahabharath	F1	163 pkts.	1630	105
	Carrot	Improved Kuroda	-	78 pkts.	1560	50
	Beetroot	Action	F1	77 pkts.	1540	60
	Beans	Local	-	190 pkts.	1900	100
	Greens	CO-1	-	72 pkts.	720	70
	Cowpea	Local	-	82 pkts.	820	75
	Brinjal	INDAM Green Round	F1	10 pkts.	200	10
	Cabbage	Maharani	F1	35 pkts.	700	25
	Cauliflower	INDAM-9803	F1	30 pkts.	600	28
	Chilly	INDAM-42	F1	15 pkts.	300	10
Spices	Pepper	Panniyoor-1	-	31	186	20
		Panniyoor-4	-	90	540	60
		Panniyoor-6	-	55	330	40
		Panniyoor-7	-	210	1260	100
		Pournami	-	105	630	55
		Panchami	-	122	732	62
		Sreekara	-	74	444	50
		Subhakara	-	60	360	40
		Malabar Excel	-	255	1530	60
		Thevam	-	52	312	22
		Sakthi	-	70	420	35
		Chengannoor	-	220	440	102
		Karimunda	-	410	820	110
Others	Cardamom dry	-	-	600g	600	1
	Vanilla	-	-	1 pkt.	50	1
	Stevia powder	-	-	1 pkt.	150	1
	Ramacham scrub	-	-	3 Nos.	45	1
	Edible mushroom	CO-1 & Florida	-	42.50 kg	5231.15	21
	Mushroom bed	CO-1	-	4 Nos.	210	4
	Tomato	Local	-	50 kg	500	40
	Cabbage	Maharani	F1	60 kg	1200	40
	Garden Beans	Local	-	30 kg	900	20
	Cauliflower	INDAM-9803	F1	3 kg	60	3
	Cowpea	-	-	25 kg	750	20
	Carrot	Improved Kuroda	-	5 kg	100	10
	Beetroot	Action	-	8 kg	160	16
	Capsicum	INDAM Mahabharath	-	40 kg	2400	80
	Orange – Garden fresh	-	-	5 kg	100	10
	Jam	-	-	20 pkts.	240	20
	Squash	-	-	4 bottle	80	4
	Sauce	-	-	5 pkts.	50	5
	Dessert wine	-	-	26 bottle	1560	25
	Sip up	-	-	189 Nos.	407.50	164
	Herbal soap	-	-	2 Nos.	130	2
	Banana	Robusta	-	41 kg	410	20

	White pepper	-	-	4 pkts.	440	4
	Soap kit	-	-	23 kits.	1245	15
	Detergent powder kit	-	-	14 kits	2800	14
	Cleaning lotion kit	-	-	1 No.	150	1
	Soap powder	-	-	72 kg	3600	50
	Cleaning lotion	-	-	351.5 litres	7225	90
	Liquid soap	-	-	294.6 litres	11630.50	60
Total					60398.15	

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Ornamental plants	Begonia	-	-	5	125	5
	Croton	-	-	19	190	10
	Bougainvillea	-	-	2	20	2
	Jasmine	-	-	3	30	3
	Strawberry	-	-	3	30	1
	Dianthus	-	-	135	2025	110
	Euphorbia	-	-	22	1050	20
	Balsam	-	-	45	450	15
	Shoe flower	-	-	23	230	10
	Chendumulla	-	-	4	240	4
	Anthurium	-	-	9	875	2
	Petunia	-	-	2	20	2
	Gomphrena	-	-	6	30	2
	Peperomia	-	-	4	100	2
	Poinsettia	-	-	2	50	1
	Coleus	-	-	4	320	2
	Azelia	-	-	2	30	1
Medicinal and Aromatic	Aloevera	-	-	108	2570	102
Spices	Cardamom tillers	PV-2	-	20	800	2
		Njallani	-	10	350	1
		White Bold	-	3	120	1
Total					9655	

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide	Pseudomonas	351.63 litres	28260.40	102
	Trichoderma	67 litres	5360.00	32
Bio Agents				
Others (specify)	Mushroom spawn	1327 pkts.	32820.00	515
	Earthworms	40 kg	12000.00	60
Total			78440.40	

9.D. Production of livestock materials: Nil

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

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

10.B. Details of Electronic Media Produced: Nil

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

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

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

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

Identification of courses for farmers/farm women

- Training need analysis done at village level.
- Interactive sessions during field visits.

Rural Youth

- Interactive sessions conducted in the major Higher Secondary Schools in this block.

In-service personnel

- Training need analysis done at district level.

10.G. Field activities

- i. Number of villages adopted: 5
- ii. No. of farm families selected: 30
- iii. No. of survey/PRA conducted:1

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Functioning.

1. Year of establishment : 2005-2006
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 oven) with digital temperature control, size 455'455'455'	1	13,725.00
6.	Conductivity meter (PH meter Eutech 510)	1	21,935.00
7.	Genesis 20 visible Spectrophotometer meter	1	1,12,499.00
8.	CITIZEN Physical Balance Model CTL-600	1	8,991.00
9.	Micro processor based conductivity	1	13,500.00
10.	Micro Processor Based Flame Photometer with N, K & Ca FILTERS & Compressor	1	45,000.00
11.	Electronic Automatic KEL PLUS Micro processor Based Twelve Place Micro Block Digestion System	1	97,043.00

12.	Electronic Balance Model: CP 2245 Srl.No.18606016	1	1,00,000.00
13.	Hot plate	1	5,400.00
Total		12	4,64,588.00

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	671	356	85	30610
Water Samples	0	0	0	0
Plant samples	0	0	0	0
Manure samples	1	1	1	50
Others (specify)	0	0	0	0
Total	672	357	86	30660

Details of samples analyzed during the 2010-11:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	52	19	15	2600
Water Samples	1	1	1	50
Plant samples	0	0	0	0
Manure samples	0	0	0	0
Others (specify)	0	0	0	0
Total	53	20	16	2650

10.I. Technology Week celebration: Nil**10. J. Interventions on drought mitigation (if the KVK included in this special programme): NA****PART XI. IMPACT****11.A. Impact of KVK activities (Not to be restricted for reporting period).**

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Synchronization of estrus in dairy animals	20	65	9000	15000
Scientific Mushroom cultivation	18	67	-	6000

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

11.B. Cases of large scale adoption: Nil.**11.C. Details of impact analysis of KVK activities carried out during the reporting period: Nil**

PART XII - LINKAGES**12.A. Functional linkage with different organizations**

Name of organization	Nature of linkage
Dept. of Agriculture, Govt. of Kerala	Joint diagnostic surveys, joint implementation, participation in meeting, Conducting training programmes etc. In service training of Agricultural Officers and Agri. Assistants, Scientists of KVK serves as resource persons for farmers training programmes organized by Agri. Dept.
Dept. of Animal husbandry, Govt. of Kerala	Animal husbandry camps, participation in meeting conducting training programmes etc.
Kerala Agricultural University	Collection of planting material of crops for the KVK nursery and supply of planting material on demand, Technical advice towards the planning and implementation of OFTs and FLDs
NABARD	Project formulation and submission.
Integrated Child Development Scheme (ICDS)	Organizing health, nutrition and childcare programmes participating in farm video programme, Radio talks etc. for extension workers of Social welfare Department.
All India Radio	Participating in farm video programmes, Radio talks announcement of training programmes and other activities of KVK.
Spices Board	Conducting training programmes in Agriculture and organizing spice clinics, Seminars, demonstration classes and field visits planting material for OFT programme were procured from spices Board Nursery.
ICRI, Myladumpara	Training programmes, Training materials, field visits, and technical consultation
Grama Panchayath of the District	Joint conduct of extension activities, participation in meetings and conducting training programmes. Women Cell of KVK imparted training programmes for SHG groups in collaboration with District Grama Panchayath. Technical staffs are members of various working groups to evaluate 11 th Five Year Plan.
Block Development Office, Nedumkandam, Devikulam	Training to Farmers and farmwomen.
Kerala Agri. University Regional Research Station	Technical Support for the implementation of various programme
National Literacy mission	Organizing farm information centres through Jana Vidhya Kendras
Planning Board	Conduct of OFT and FLD on Paddy.
Directorate of extension Govt. of India	Implementation of Central Sector Scheme of Agricultural extension through Voluntary organization
Cardamom Research Station, Pampadumpara	Technical consultancy supply of recently released Cardamom variety PV1 and PV2 to Germplasm collection of KVK and Field visit.
Principal Agricultural Office Idukki	Programme Coordinator of KVK as a member of District Nodal Agency of NWDPR under the Principal Agricultural Office, Idukki
Dairy Development Department	Procurement of planting materials for Frontline Demonstration programme.
Grama Panchayath, Santhanpara	Training Organizer is the vice-Chairman of working Group on Agriculture as a part of Kerala Development programme conduct of trainings etc.
Society for Orientation and Rural Development Kudumbasree	Conduct of Seminar in different parts of Idukki district Trainings to Kudumbasree Members
Vocational Higher Secondary Education, Directorate	OJT to V.H.S.E. 2 nd year students and orientation courses to 1 st year students.
ATMA	Management Committee and governing board meeting. Preparation and conduct of OFT and FLD.
High Range Development Society	Trainings.
Union Bank of India (Union RSETI)	Trainings
Akshaya Charitable Society	Trainings
Directorate of Extension, Ministry of Agriculture, Govt. of India	Implementing agency for Central Sector Scheme on Agricultural extension.
Schools	Trainings.

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Training on Organic farming	February 2011	Department of Agriculture	77000.00

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes.

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

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	Working committee meeting	7	-	-
02	Research projects				
03	Training programmes				
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela				
	Technology Week				
	Exposure visit	Visit to TNAU & Nilgris KVK	2	-	-
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agripreneurs development				
	Selection of Best Farmer entrepreneur in the district	Assessment & selection	1	-	-

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

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

12.F. Details of linkage with RKVY: Nil

12. G Kisan Mobile Advisory Services: Nil

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Mushroom unit	2002	10 m ²	Oyster mushroom var. CO1	Mushroom	57.55 Kg	1,000.00	5,755.00	-
2	Spawn production unit	2009	10 m ²	Var.CO1, CO2, Florida	Spawn	2340 pkts.	10,132.20	46,950.00	Funded by SHM
3	Mist chamber	2009	96 m ²	Sreekara Subhakara Panchami Pournami	Pepper vines	6486	7,000.00	15,639.00	Funded by SHM
4	Rain shelter	2009	50 m ²	-	Ornamental plants	294	2,500.00	6,993.50	Funded by SHM
5	Terrace Vegetable cultivation	2010	170 m ²	Local	Tomato	331 kg	3274.70	6070.00	Revolving fund
			Maharani	Cabbage					
			Local	Garden Beans					
			INDAM-9803	Cauliflower					
			-	Cowpea					
			Improved Kuroda	Carrot					
			Action	Beetroot					
			INDAM Mahabharath	Capsicum					

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

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Pseudomonas	351.63 litres	15823.35	28260.40	
2.	Trichoderma	67 litres	2345.00	5360.00	
3.	Earthworms	40 kg	5000.00	12000.00	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Japanese quail	Nandanam	Meat & egg	-	-	-	Production not yet started

13.E. Utilization of hostel facilities: Nil**13. Database management**

S. No	Database target	Database created
1.	In progress (financial year 2011-12)	

13.G. Details on Rain Water Harvesting structure and micro-irrigation system: Nil**PART XIV - FINANCIAL PERFORMANCE****14.A. Details of KVK Bank accounts**

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of Travancore	Rajakumari	2018	Chairman	57060837003	-	SBTR0000453
With KVK	State Bank of Travancore	Rajakumari	2018	Chairman & Programme Coordinator	57060836995	-	SBTR0000453
	District Cooperative Bank	Santhanpara	-	KVK Revolving Fund	3754	-	-

14.B. Utilization of funds under FLD on Cotton (Rs. in Lakh): Nil**14.C. Utilization of KVK funds during the year 2010-11 (Rs. in lakh)**

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	86.69	86.69	76.58
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)	2.40	2.40	2.40
B	POL, repair of vehicles, tractor and equipments	1.40	1.40	1.40
C	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	0.85	0.85	0.85
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.45	0.45	0.45
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.75	1.75	1.75
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.80	0.80	0.80
G	Training of extension functionaries	0.25	0.25	0.25
H	Maintenance of buildings	0.50	0.50	0.50
I	Establishment of Soil, Plant & Water Testing Laboratory	0.00	0.00	0.00
J	Library	0.05	0.05	0.05
K	Farmers Field School	0.25	0.25	0.25
L	Extension activities	0.30	0.30	0.30
TOTAL (A)		96.94	96.94	86.83
B. Non-Recurring Contingencies				
1	Works	0.00	0.00	0.00
2	Equipments including SWTL & Furniture	3.70	3.70	3.70
3	Vehicle (Four wheeler/Two wheeler, please specify)	0.00	0.00	0.00
4	Library (Purchase of assets like books & journals)	0.10	0.10	0.10
TOTAL (B)		3.80	3.80	3.80
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		100.74	100.74	90.63

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2008 to March 2009	68,826.00	7,80,337.00	3,84,964.00	4,57,150.00
April 2009 to March 2010	4,57,150.00	6,36,699.00	5,49,636.00	5,44,498.00
April 2010 to March 2011	5,44,498.00	3,74,483.00	6,13,997.00	3,04,982.00

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. S. Jayababu	Programme Coordinator i/c.	National Consultation Workshop	PDBC, Bangalore	29 th & 30 th October 2010
Jayisy Joseph & Biju Narayanan	Programme Assistant (Home Science) Programme Assistant (Computer)	National Workshop on Public Private Partnership for enhancing Agricultural Extension Services	Horticultural College, KAU, Thrissur	10 th November 2010
Dr. S. Jayababu	Programme Coordinator i/c.	IFS Training	KVK, Kattupakkam, TANUVAS	9 th -13 th November 2010
Dr. S. Jayababu	Programme Coordinator i/c.	Orientation training	CTCRI, Trivandrum	14 th & 15 th December 2010
Dr. Benjamin Mathew	Subject Matter Specialist (Agri. Extension)	Training on Precision farming	KVK Malappuram, Tavanur	1 st February 2011
Sudhakar	Subject Matter Specialist (Plant Protection)	Executive Intervention Interaction	KAU, Thrissur	25 th & 26 th March 2011

16. Please include any other important and relevant information which has not been reflected above: Nil.

SUMMARY FOR 2010-11

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Pepper	Efficacy of consortium bio-fertilizers in improving productivity of black pepper	5
Varietal Evaluation	Turmeric	Assessing the suitability of turmeric varieties Pratibha, Sobha & Varna under High Range conditions	4
Integrated Pest Management			
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			9

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management	Dairy cattle	Synchronization of estrus in dairy cows	10
Evaluation of Breeds	Poultry	Assessing the performance of Gramasree, Gramalakshmi & Rhodo White under high range conditions	10
Feed and Fodder management			
Nutrition Management			
Production and Management	Quail	Assessing the performance of Nandanam variety of quail under high ranges of Idukki	5
Others (Pl. specify)			
Total			25

Summary of technologies assessed under various enterprises: Nil

Summary of technologies assessed under home science: Nil

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
Integrated Nutrient Management	Banana	Nutrient Management of Nendran Banana under the agro-climatic conditions of High Ranges of Idukki	5
Varietal Evaluation			
Integrated Pest Management			
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			5

Summary of technologies assessed under refinement of various livestock: Nil

Summary of technologies refined under various enterprises: Nil

Summary of technologies refined under home science: Nil

III. FRONTLINE DEMONSTRATION

Cotton: Nil

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals																		
Paddy	Farm mechanization	Mechanized paddy farming	-	13	5	31.4	28.7	9.4	-	-	32,088	43,960	11,872	1.37	41,854	40,180	-1,674	0.96
	INM	Integrated Nutrient Management in Paddy	-	20	5	29.5	28.7	1.4	-	-	35,120	40,740	5,620	1.16	41,854	40,180	-1,674	0.96
Millets																		
Oilseeds																		
Pulses																		
Vegetables																		
Bitter gourd	IPM	Integrated Management of yellowing in bitter gourd	-	5	1	20 t/ha	14 t/ha	30	H	A	16250	20320	7997	1:1.25	22450	20320	-2130	1:0.90
Flowers																		
Ornamental																		
Fruit																		
Spices and condiments																		
Pepper	Value addition	Mechanized white pepper production	1	1	9	10 units	-	-	-	-	12600	28500	15900	2.26	-	-	-	-
Cardamom	Crop management	Integrated crop management		30	5	0.92	0.81	13.6	-	-	392248	1012000	619752	2.58	403081	850500	447419	2.11
Commercial																		
Medicinal and aromatic																		
Fodder																		
Plantation																		
Fibre																		
Others (pl. specify)																		
Sweet potato	Popularization of improved variety	Demonstration of Gouri variety of sweet potato	1	3	0.24	2000	1352	32.40	-	-	20000	34000	14000	1.70	18000	23000	5000	1.27
Total																		

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

** BCR= GROSS RETURN/GROSS COST

Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management	1	0	5	5	0	0	0	0	5	5
Integrated Crop Management										
Soil and Water Conservation	1	20	0	20	0	0	0	20	0	20
Integrated Nutrient Management	1	18	0	18	0	0	0	18	0	18
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	1	0	18	18	0	0	0	0	18	18
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	1	3	18	21	0	0	0	3	18	21
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	1	41	0	41	0	0	0	41	0	41
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs	1	32	14	46	0	0	0	32	14	46
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl. specify)										
Livestock Production and Management										
Dairy Management	1	70	0	70	0	0	0	70	0	70
Poultry Management	1	9	14	23	0	0	0	9	14	23
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	3	18	21	0	0	0	3	18	21
Animal Disease Management	1	30	0	30	0	0	0	30	0	30
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	1	3	18	21	0	0	0	3	18	21
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	2	3	20	23	0	0	0	3	20	23
Gender mainstreaming through SHGs										
Storage loss minimization techniques										

Value addition	4	13	33	46	0	0	0	13	33	46
Women empowerment										
Location specific drudgery production										
Rural Crafts	2	2	4	6	0	0	0	2	4	6
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	26	10	36	4	0	4	30	10	40
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl. specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl. specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										

Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	6	9	34	43	0	11	11	9	45	54
Apiculture										
Others (pl. specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl. specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	27	282	206	488	4	11	44	288	217	503

Farmers' Training including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	2	50	3	53	5	2	7	55	5	60
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	2	40	0	40	4	0	4	44	0	44
Soil and Water Conservation	1	27	7	34	0	0	0	27	7	34
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	1	6	6	12	3	4	7	9	10	19
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	1	17	0	17	0	0	0	17	0	17
Integrated water management										
Integrated nutrient management	1	50	50	100	0	0	0	50	50	100
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing	1	0	18	18	0	0	0	0	18	18
Others (pl. specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management	1	20	13	33	10	10	20	30	23	53
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	4	12	4	16	0	0	0	12	4	16
Processing and cooking	2	9	29	38	4	19	23	13	48	61
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	4	1	25	26	0	0	0	1	25	26
Women empowerment										
Location specific drudgery production										
Rural Crafts	5	0	20	20	0	5	5	0	25	25
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	0	14	14	0	0	0	0	14	14
Integrated Disease Management	1	35	0	35	0	0	0	35	0	35
Bio-control of pests and diseases	1	44	0	44	0	0	0	44	0	44
Production of bio control agents and bio pesticides										
Others (pl. specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl. specify)										

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production	1	25	0	25	0	0	0	25	0	25
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production	1	1	7	8	0	3	3	1	10	11
Apiculture	3	78	8	86	0	0	0	78	8	86
Others (pl. specify)										
Capacity Building and Group Dynamics										
Leadership development										

Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl. specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	33	415	204	619	26	43	69	441	247	688

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	1	12	19	31	1	1	2	13	20	33
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	2	40	36	76	1	1	2	41	37	78
Small scale processing										
Post Harvest Technology	1	0	25	25	0	1	1	0	26	26
Tailoring and Stitching	1	0	26	26	0	1	1	0	27	27
Rural Crafts	11	9	29	38	1	10	11	10	39	49
Production of quality animal products										
Dairying	3	61	43	104	0	20	20	61	63	124
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	19	122	178	300	3	34	37	125	212	337

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	17	24	41	3	1	4	20	25	45
Small scale processing										
Post Harvest Technology	2	0	15	15	0	0	0	0	15	15
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	3	17	39	56	3	1	4	20	40	60

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	1	31	43	74	0	1	1	31	44	75
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl. specify)										
Total	1	31	43	74	0	1	1	31	44	75

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

Sponsored training programmes

S. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Increasing production and productivity of crops	3	72	78	150	4	0	4	76	78	154
1.b.	Commercial production of vegetables	2	6	24	30	3	4	7	9	28	37
2	Production and value addition										
2.a.	Fruit Plants	2	0	32	30	0	0	0	0	35	35
2.b.	Ornamental plants										
2.c.	Spices crops	1	35	0	35	0	0	0	35	0	35
3.	Soil health and fertility management	3	27	32	59	0	0	0	27	32	59
4	Production of Inputs at site										
5	Methods of protective cultivation	3	36	60	96	4	0	4	40	60	100
6	Others (pl. specify)	1	0	25	25	0	0	0	0	25	25
7	Post harvest technology and value addition										
7.a.	Processing and value addition	3	53	34	87	4	19	23	57	53	110
7.b.	Others (pl. specify)	3	58	68	126	0	0	0	58	68	126

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	1	41	0	41	0	0	0	41	0	41
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	2	4	31	35	0	0	0	4	31	35
11.b.	Economic empowerment of women	1	3	18	21	0	0	0	3	18	21
11.c.	Drudgery reduction of women	2	0	29	29	0	0	0	0	29	29
11.d.	Others (pl. specify)	1	13	35	48	0	0	0	13	35	48
12	Agricultural Extension										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl. specify)	1	18	0	18	0	0	0	18	0	18
	Total	29	336	466	832	15	23	38	381	489	870

Details of vocational training programmes carried out for rural youth

S. No..	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.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	1	0	5	5	0	0	0	0	5	5
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	1	0	7	7	0	3	3	0	10	10
4.h.	Nursery, grafting etc.	1	0	5	5	0	0	0	0	5	5
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agri. para-workers, para-vet training										
4.k.	Others (Fabric and bouquet)	2	0	35	35	0	15	15	0	50	50
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl. specify)										
	Grand Total	5	0	52	52	0	18	18	0	70	70

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	86	93	22	115
Diagnostic visits	1	1	0	1
Field Day	14	61	0	61
Group discussions				
Kisan Ghosthi				
Film Show				

Self -help groups				
Kisan Mela				
Exhibition				
Scientists' visit to farmers field	18	82	0	82
Plant/animal health camps				
Farm Science Club				
Ex-trainees Sammelan				
Farmers' seminar/workshop	95	735	56	791
Method Demonstrations				
Celebration of important days				
Special day celebration				
Exposure visits				
Others (pl. specify)				
Total	201	961	76	1037

Details of other extension programmes: Nil

PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals					
Oilseeds					
Pulses					
Commercial crops					
Vegetables	Capsicum	INDAM Mahabharath	163 pkts.	1630	105
	Carrot	Improved Kuroda	78 pkts.	1560	50
	Beetroot	Action	77 pkts.	1540	60
	Beans	Local	190 pkts.	1900	100
	Greens	CO-1	72 pkts.	720	70
	Cowpea	Local	82 pkts.	820	75
	Brinjal	INDAM Green Round	10 pkts.	200	10
	Cabbage	Maharani	35 pkts.	700	25
	Cauliflower	INDAM-9803	30 pkts.	600	28
	Chilly	INDAM-42	15 pkts.	300	10
Flower crops					
Spices	Pepper	Panniyoor-1	31	186	20
		Panniyoor-4	90	540	60
		Panniyoor-6	55	330	40
		Panniyoor-7	210	1260	100
		Pournami	105	630	55
		Panchami	122	732	62
		Sreekara	74	444	50
		Subhakara	60	360	40
		Malabar Excel	255	1530	60
		Thevam	52	312	22
		Sakthi	70	420	35
		Chengannoor	220	440	102
		Karimunda	410	820	110
Fodder crop seeds					
Fiber crops					
Forest Species					

Others	Cardamom dry	-	600g	600	1
	Vanilla	-	1 pkt.	50	1
	Stevia powder	-	1 pkt.	150	1
	Ramacham scrub	-	3 Nos.	45	1
	Edible mushroom	CO-1 & Florida	42.50 kg	5231.15	21
	Mushroom bed	CO-1	4 Nos.	210	4
	Tomato	Local	50 kg	500	40
	Cabbage	Maharani	60 kg	1200	40
	Garden Beans	Local	30 kg	900	20
	Cauliflower	INDAM-9803	3 kg	60	3
	Cowpea	-	25 kg	750	20
	Carrot	Improved Kuroda	5 kg	100	10
	Beetroot	Action	8 kg	160	16
	Capsicum	INDAM Mahabharath	40 kg	2400	80
	Orange – Garden fresh	-	5 kg	100	10
	Jam	-	20 pkts.	240	20
	Squash	-	4 bottle	80	4
	Sauce	-	5 pkts.	50	5
	Dessert wine	-	26 bottle	1560	25
	Sip up	-	189 Nos.	407.50	164
	Herbal soap	-	2 Nos.	130	2
	Banana	Robusta	41 kg	410	20
	White pepper	-	4 pkts.	440	4
	Soap kit	-	23 kits.	1245	15
	Detergent powder kit	-	14 kits	2800	14
	Cleaning lotion kit	-	1 No.	150	1
Soap powder	-	72 kg	3600	50	
Cleaning lotion	-	351.5 litres	7225	90	
Liquid soap	-	294.6 litres	11630.50	60	
Total			60398.15		

Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Number	Value (Rs.)	Number of farmers
Commercial					
Vegetable seedlings					
Fruits					
Ornamental plants	Begonia	-	5	125	5
	Croton	-	19	190	10
	Bougainvillea	-	2	20	2
	Jasmine	-	3	30	3
	Strawberry	-	3	30	1
	Dianthus	-	135	2025	110
	Euphorbia	-	22	1050	20
	Balsam	-	45	450	15
	Shoe flower	-	23	230	10
	Chendumulla	-	4	240	4
	Anthurium	-	9	875	2
	Petunia	-	2	20	2
	Gomphrena	-	6	30	2
	Peperomia	-	4	100	2
	Poinsettia	-	2	50	1

	Coleus	-	4	320	2
	Azalia	-	2	30	1
Medicinal and Aromatic	Aloevera	-	108	2570	102
Plantation					
Spices	Cardamom tillers	PV-2	20	800	2
		Njallani	10	350	1
		White Bold	3	120	1
Tuber					
Fodder crop saplings					
Forest Species					
Others					
Total				9655.00	

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide	Pseudomonas	351.63 litres	28260.40	102
	Trichoderma	67 litres	5360.00	32
Bio Agents				
Others	Mushroom spawn	1327 pkts.	32820.00	515
	Earthworms	40 kg	12000.00	60
Total			78440.40	

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	52	19	15	2600
Water	1	1	1	50
Plant	0	0	0	0
Manure	0	0	0	0
Others (pl. specify)	0	0	0	0
Total	53	20	16	2650

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted

Nil.

IX. NEWSLETTER

Number of issues of newsletter published

Nil.

X. RESEARCH PAPER PUBLISHED

Number of research paper published

Nil.

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

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