**ANNUAL REPORT 2016-17**

**(FOR THE PERIOD APRIL 2016 TO MARCH 2017)**

ICAR - KRISHI VIGYAN KENDRA (IDUKKI)

PART I - GENERAL INFORMATION ABOUT THE KVK

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

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

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

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Telephone / Contact | | |
|  | Residence | Mobile | Email |
| Dr. Binu John Sam, Programme Coordinator i/c. | 04868247048 | +91 9061628822 | binujohnsambkvk@gmail.com |

1.4. Year of sanction: 1994.

**1.5. Staff Position (as on 31st March 2016)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Sanctioned post** | **Name of the incumbent** | **Designation** | **M/F** | **Discipline** | **Highest Qualification**  **(for PC, SMS and Prog. Asst.)** | **Pay**  **Scale** | **Basic pay** | **Date of joining KVK** | **Permanent**  **/Temporary** | **Category (SC/ST/**  **OBC/**  **Others)** |
| 1 | Programme  Coordinator | Vacant | Programme  Coordinator | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| 2 | SMS | Dr. S. Jayababu | Subject Matter Specialist | M | Animal Science | B.V.Sc. & AH | 15600-39100 | 21000 | 19-06-1995 | Permanent | Others |
| 3 | SMS | Manju Jincy Varghese | Subject Matter Specialist | F | Soil Science | M.Sc. Agriculture (Soil Science) | 15600-39100 | 21000 | 10-01-2011 | Permanent | Others |
| 4 | SMS | Dr. Binu John Sam | Subject Matter Specialist | M | Horticulture | Ph.D. Horticulture | 15600-39100 | 21000 | 17-01-2011 | Permanent | Others |
| 5 | SMS | Sudhakar Soundarajan | Subject Matter Specialist | M | Plant Protection | M.Sc. Agricultural Entomology, MBA | 15600-39100 | 21000 | 27-01-2011 | Permanent | OBC |
| 6 | SMS | Vacant | Subject Matter Specialist | **-** | Agronomy | **-** | **-** | **-** | **-** | **-** | **-** |
| 7 | SMS | Vacant | Subject Matter Specialist | **-** | Agri. Extension | **-** | **-** | **-** | **-** | **-** | **-** |
| 8 | Programme Assistant (Lab Tech.)  / T-4 | Jayisy Joseph | Programme Assistant | F | Home Science | M. Sc. Home Science (Extension for Rural Development) | 9300-34800 | 13500 | 20-06-1995 | Permanent | Others |
| 9 | Programme Assistant (Computer)  / T-4 | Biju Narayanan | Programme Assistant | M | Computer Application | M.C.A., PGDCA | 9300-34800 | 13500 | 01-10-2007 | Permanent | OBC |
| 10 | Programme Assistant/ Farm Manager | Rachel Skariakutty | Programme Assistant | F | Rural Craft | M.A. Sociology (P.G. Diploma in Rural Development) | 9300-34800 | 13500 | 05-06-1995 | Permanent | Others |
| 11 | Assistant | Shaji. K. Kakkattu | Assistant | M | **-** | **-** | 9300-34800 | 13500 | 05-06-1995 | Permanent | Others |
| 12 | Jr. Stenographer | Daisy Daniel | Jr. Stenographer | F | **-** | **-** | 5200-20200 | 7100 | 05-06-1995 | Permanent | Others |
| 13 | Driver | P. Nandagopal | Driver | M | **-** | **-** | 5200-20200 | 7200 | 05-06-1995 | Permanent | OBC |
| 14 | Auxiliary Staff | K.T. Mathew | Peon/ Messenger | M | **-** | **-** | 5200-20200 | 7000 | 05-06-1995 | Permanent | Others |
| 15 | Supporting Staff-1 | K.O. Jose | Skilled Supporting Staff-1 | M | **-** | **-** | 5200-20200 | 7000 | 05-06-1995 | Permanent | Others |
| 16 | Supporting Staff-2 | P. Sabu | Skilled Supporting Staff-2 | M | **-** | **-** | 5200-20200 | 7000 | 05-06-1995 | Permanent | Others |

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

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

**1.7. Infrastructural Development:**

**A) Buildings**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Name of building** | **Source of**  **funding** | **Stage** | | | | | |
| **Complete** | | | **Incomplete** | | |
| **Completion**  **Date** | **Plinth area (Sq. m.)** | **Expenditure (Rs.)** | **Starting Date** | **Plinth area**  **(Sq. m.)** | **Status of construction** |
| 1. | Administrative  Building | ICAR | 2002 | 740 | 47,85,208.10 | - | - | - |
| 2. | Farmers’ Hostel | NA | - | - | - | - | - | *Master Plan & Estimate submitted. Sanction pending*. |
| 3. | Staff Quarters | NA | - | - | - | - | - | - |
| 4. | Demonstration Units |  |  |  |  |  |  |  |
|  | 1. Duck cum fish culture unit. | RF | 2009 | 50 | 7,000.00 | - | - | - |
|  | 2. Mushroom unit | Grama 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 | - | - | - | - | - | *Urgent requirement as the area is constantly facing intuition of wild animals and other intruders* |
| 6 | Rain Water harvesting system | NA | - | - | - | - | - | - |
| 7 | Threshing floor | NA | - | - | - | - | - | - |
| 8 | Farm godown | NA | - | - | - | - | - | - |
| 9 | Vehicle garage |  |  |  |  |  |  | *Urgently required* |

B) Vehicles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of vehicle** | **Year of purchase** | **Cost (Rs.)** | **Total kms. Run** | **Present status** |
| Mahindra Bolero SLE | May - 2012 | 5,78,380.36 | 87660 | Good condition. |
| Honda Aviator | March - 2009 | 50,000.00 | 12146 | Running condition |
| Motor Bike (Suzuki Shogun) | January - 1995 | 37,972.78 | 8864 | Not in use. |

**C) Equipments & AV aids**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the equipment** | **Year of purchase** | **Cost (Rs.)** | **Present status** |
| **A.V. aids (Specify)** | | | |
| Television | 1995 | 20,894.00 | Not working |
| GE OHP | 1996 | 7,100.00 | Good, but not in use |
| ZETT Slide Projector | 1996 | 11,556.00 | Not working |
| Sharp Video Player | 1996 | 10,000.00 | Not working |
| Pentax SLR Camera | 1996 | 13,599.15 | Not working |
| Ahuja Amplifier SSA 160 636956 | 2003 | 7,010.00 | Good Condition |
| Ahuja Speaker, SRX50DX | 2003 | 1,825.00 | Good Condition |
| Ahuja Mike SHM 1000XLR | 2003 | 2,295.00 | Not in use |
| Ahuja Mike ASMT 80 XLR | 2003 | 1,470.00 | Good Condition |
| Ahuja mike Stand DGV | 2003 | 510.00 | Good Condition |
| Ahuja Mike stand DGT | 2003 | 295.00 | Good Condition |
| Ahuja portable teaching wireless WA 320 AWL 321 | 2003 | 9,700.00 | Good Condition |
| Honda generator Model EBK 2000 AC | 2003 | 32,490.00 | Good Condition |
| LPG Generator 5000 CLS | 2011 | 100000.00 | Good Condition |
| LCD Projector (EPSON\_EBW8) | 2010 | 55186.00 | Good Condition |
| Liberty Show Juno 5 x 7 (MW) Screen | 2010 | 5885.00 | Good Condition |
| Kodak Knoma Camera | 1995 | 1550.00 | Obsolete |
| Tripod Screen 52x70 inch | 1996 | 2029.50 | In Working condition |
| **Soil Science Lab Equipments (Specify)** | | | |
| KEMI HOT PLATE with Energy Regulator | 2006 | 5,400.00 | Bad |
| Electronic Balance | 2006 | 1,00,000.00 | Under use but needs repair |
| Physical Balance | 2006 | 8,991.00 | Good |
| Spectrophotometer | 2006 | 1,17,499.00 | Under use but needs repair |
| Electronic Automatic KEL PLUS model KES 12L (Nitrogen Analyzer) | 2006 | 97,043.00 | Under use but needs repair |
| Conductivity Meter (PH Meter Utech 510) | 2006 | 21,935.00 | Under use but needs repair |
| HOT AIR OVEN | 2006 | 13,725.00 | Good |
| Water bath WDB2 350 x 400 100mm Size 12 | 2006 | 41,895.00 | Good |
| Flame Photometer | 2006 | 45,000.00 | Under use but needs repair |
| Conductivity Meter | 2006 | 13,500.00 | Not working and requires new |
| LG 280 Litre Fridge Model – GI 296 TM V-Guard Stabilizer | 2006 | 250.00 | Good |
| Mixer grinder 750 Watts | 2006 | 4,500.00 | Bad and requires new |
| Online UPS System with Battery | 2006 | 36,916.00 | Needs repair |
| Fume Cupboard KEMI | 2006 | 2,68,192.00 | Good |
| **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 | Obsolete. |
| FACIT Typewriter (English) | 1995 | 9429.00 | Obsolete. |
| Stencil Duplicator | 1995 | 13,700.00 | Obsolete. |
| Ortem sewing machine | 1995 | 2,300.00 | Obsolete. |
| Computer with Printer | 2003 | 49,750.00 | Obsolete, needs to be replaced by a laptop & printer |
| Photostat Machine | 2003 | 80,000.00 | Bad and outdated machine, urgently requires a new machine |
| Brush Cutter | 2009 | 23,726.00 | Good, needs servicing |
| Fax Machine | 2009 | 15,000.00 | Needs servicing |
| Laptop Computer (DELL Studio 14 N) | 2010 | 37,150.00 | Good |
| Inkjet Printer (Epson TX 111 AIO) | 2010 | 1,779.00 | Good |

**1.8. Details SAC meeting conducted in 2016-17**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Date** | **Number of Participants** | **No. of absentees** | **Salient Recommendations** | **Action taken** |
| 1 | 30/01/2017 | 22 | 6 | * Need for taking all the technologies to the doorsteps of farmers. * Plan and involves the partners to utilize the infrastructure and other facilities of KVK to the maximum. * Have partnership with all production organizations of this district. * Steps to improve soil Fertility management & INM to make sure the progressive farmers to adopt soil testing, soil conservation measures and also soil tested based recommendations. * Package of practices of all crops will be concentrated more in future. * In forthcoming action plan of KVK highlight and prior importance for Drought management. * Location specific crop cultivation has to be practiced. * Tuber and Pulses should be given priority. * Fertiliser recommendation and soil health status has to be given priority for all crop cultivation. * Bio hub activities should be spread to all other KVK”s * Marketing outlet for seedlings should be made in outer area. * Pesticide residue lab should be made available in KVK campus. * Honeybee and Strawberry should be concentrated more in KVK. * Farmer innovations have to be identified. * Concentrate more on dry flower as well as fresh flower. * More training programmes should be conducted and their follow up has to be practiced. * Season wise crop insurance scheme has to be concentrated for all crops. * Lead bank has to be link with all crops training programmes. * Concentrate more revenue training programmes. | All these recommendations shall be prioritized and taken up during the next Financial Year based on availability of funds. |

**PART II - DETAILS OF DISTRICT**

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

|  |  |
| --- | --- |
| S. No | Farming system/enterprise |
| 1 | Cardamom and Pepper based farming system in the High Ranges of the District |
| 2 | Paddy belts in specific locations |
| 3 | Homestead based farming |
| 4 | Tea plantation |
| 5 | Vegetables (Bitter gourd & Cowpea) |
| 6 | Cool season vegetables in Devikulam Block |
| 7 | Banana cropping |
| 8 | Rubber as mono-crop |
| 9 | Dairy cattle & Poultry production Management |

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

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

|  |  |  |
| --- | --- | --- |
| S. No | Agro ecological situation | Characteristics |
| 1. | Agro Ecological Zone-1 | Major part is mono-cropped with rubber, other areas-homestead farming is practiced with tapioca, banana and vegetables, altitude up to 500M above mean sea level, humid tropics spread over the zone. South West and North East monsoon are active and moderately distributed. South West monsoon with June maximum (South of 110 N latitude) |
| 2. | Agro Ecological Zone-2 | Major cropping pattern-Pepper, Cardamom, Coffee, Areca nut, Cocoa and Rubber intercropped, altitude 500M above mean sea level, humid tropics spread over the zone. Steep slopes |
| 3. | Agro Ecological Zone-3 | High altitude zone-Vattavada & Kanthalloor. Cool season vegetables occupy major area. Potato, temperate fruits are grown in a small scale. Zone includes the only wheat-growing tract of Kerala. North-East monsoon is prominent. |

2.3 Soil type/s

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

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

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

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

**2.5. Weather data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | Temperature 0 C | | Relative Humidity (%) |
|  |  | Maximum | Minimum |  |
| April 2016 | 123.4 | 31.1 | 20.4 | 92.4 |
| May 2016 | 13.2 | 29.8 | 21.0 | 91.4 |
| June 2016 | 99.5 | 27.6 | 17.8 | 95.4 |
| July 2016 | 92.3 | 24.7 | 17.9 | 99.0 |
| August 2016 | 111.7 | 22.5 | 17.5 | 99.4 |
| September 2016 | 85.2 | 26.7 | 17.2 | 95.5 |
| October 2016 | 65.1 | 26.7 | 17.5 | 94.5 |
| November 2016 | 24.5 | 26.6 | 15.6 | 94.3 |
| December 2016 | 1.4 | 25.4 | 15.4 | 90.1 |
| January 2017 | 1.2 | 24.3 | 12.4 | 90.4 |
| February 2017 | 2.1 | 25.8 | 13.3 | 90.1 |
| March 2017 | 2.4 | 28.9 | 17.4 | 91.0 |

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Production** | **Productivity** |
| **Cattle** | | | |
| *Crossbred* | 160581 | 434938 ton (Milk) & 13090.87 MT (meat) | **-** |
| *Indigenous* | - | 4309 ton (milk) | **-** |
| **Buffalo** | 7677 | 4481 ton (milk) & 12385.62 MT (meat) | **-** |
| **Sheep** | | | |
| Crossbred | 35 | - | **-** |
| *Indigenous* | - | - | **-** |
| **Goats** | 128474 | 11898 ton (Milk) & 8092.10 MT (meat) | **-** |
| **Pigs** |  |  | **-** |
| *Crossbred* | 14131 | 16136.5 MT (Meat) | **-** |
| *Indigenous* |  |  |  |
| **Rabbits** | 29678 | **-** | **-** |
| **Poultry** | | | |
| Hens | 632001 | 9.64 crores (Egg) | **-** |
| *Desi* | **-** | 238 crores (Egg) | **-** |
| *Improved* | **-** | 7.25 crores (Egg) & 13119.8 MT (Meat) | **-** |
| Ducks | **-** | 2.10 crores (Egg) | **-** |
| Turkey and others | **-** | **-** |  |

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

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

* 1. District profile has been **Updated** for 2016-17 Yes / No: Yes.
  2. 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 | Santhanpara,  Rajakumary,  Parathodu,  Senapathy,  Rajakkad & Vathikudy | 2011-2016 | Small cardamom  Black pepper  Cowpea,  Tomato &  Bitter gourd | Stem and Capsule borer, Root Grub  Thrips  Fusarium  Foot rot, Quick wilt disease  Downy mildew & Nematode | BIPM  Crop Improvement  BIPDM |
| 2 | Devikulam | Devikulam | Vattavada,  Kannan Devan Hills, Marayoor, Mankulam, Anaviratty,  Kanthaloore &  Munnar | 2012-2016 | Cabbage  Potato  Carrot  Straw berry  Beans | Black rot  Bacterial wilt  Root weevil  Powdery mildew  White fly | BIPDM |
| 3 | Peermade | Azhutha | Elappara  Kokkayar  Kumily  Peermedu  Periyar  Upputhara & Vagamon | 2010-2016 | Tea  Coffee & Vegetables | Powdery mildew, Leaf spot & Downy mildew | BIPDM |
| 4 | Devikulam | Adimali | Adimali | 2 Years | Black Pepper, Cardamom, Banana, Vegetables, livestock & Poultry | Pest outbreak | Integrated Pest Management, Scientific management of livestock and poultry |
| 5 | Udumbanchola | Chinnakanal | Chinnakanal | 2 Years | Cardamom | Indiscriminate use of chemical fertilizers | Integrated Nutrient Management, Scientific management of livestock and poultry |
| 6 | Udumbanchola | Santhanpara | Santhanpara | 5 Years | Cardamom, Black Pepper, Banana livestock & Poultry | Indiscriminate use of PP Chemicals | Integrated Pest Management Scientific Disease Management in dairy cattle and Poultry |
| 7 | Udumbanchola | Rajakkad | Rajakkad | 5 Years | Cardamom, Black Pepper, Banana, Vegetables livestock & Poultry | Indiscriminate use of chemical inputs | Integrated Crop Management, Scientific Disease Management in dairy cattle and Poultry |
| 8 | Udumbanchola | Nedumkandam | Nedumkandam | 2 Years | Cardamom, Black Pepper, Banana livestock & Poultry | Indiscriminate use of chemical inputs | Integrated Crop Management, Scientific management of livestock and poultry |
| 9 | Udumbanchola | Santhanpara | Santhanpara | 5 Years | Cardamom, Black Pepper, Banana, Vegetable livestock & Poultry | Indiscriminate use of chemical inputs | Integrated Crop Management, Fodder production and management Fodder production and management |
| 10 | Udumbanchola | Senapathy | Senapathy | 3 Years | Cardamom, Black Pepper, Banana, Vegetables, Mushroom, livestock & Poultry | Indiscriminate use of chemical inputs | Integrated Crop Management, Scientific management of livestock and poultry, Fodder production and management |

**2.9 Priority thrust areas:**

|  |  |
| --- | --- |
| **S. No.** | **Thrust area** |
| 1. | Integrated Nutrient Management in major crops |
| 2. | IPDM in major Plantation and Vegetable crops |
| 3. | Integrated sustainable farming system models |
| 4. | Organic agriculture |
| 5. | Scientific management of livestock and poultry |
| 6. | Scientific Disease Management in dairy cattle and Poultry |
| 7. | Fodder production and management |
| 8. | Value addition of farm produce |

**PART III - TECHNICAL ACHIEVEMENTS**

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **OFT** | | | | **FLD** | | | |
| **1** | | | | **2** | | | |
| **Number of OFTs** | | **Number of farmers** | | **Number of FLDs** | | **Number of farmers** | |
| **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** |
| 7 | 7 | 35 | 35 | 15 | 15 | 106 | 106 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 135 | 112 | 3000 | 3769 | 500 | 436 | 100000 | 80334 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed Production (Qtl.)** | | **Planting materials (Nos.)** | |
| **5** | | **6** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 0.5 | Nil | 1000 | Nil |

|  |  |  |  |
| --- | --- | --- | --- |
| **Livestock, poultry strains and fingerlings (No.)** | | **Bio-products** | |
| **7** | | **8** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 200 | 200 birds | Metarhizium 200 L | 145 |
|  |  | *Bacillus thruingensis* 100 L | 69 |
|  |  | Beauveria 1000 L | 448 |
|  |  | Lecanicillium 500 L | 64 |
|  |  | Yellow sticky trap 2000 Nos. | 5590 |
|  |  | Blue sticky trap 1000 Nos. | 10 |
|  |  | Neem oil 500 L | 995 |
|  |  | Trichoderma 1000 L | 1384 |
|  |  | Pseudomonas 1000 L | 1074 |
|  |  | *Bacillus subtillus* 100 L | 24 |

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

| **S. No** | **Thrust area** | **Crop/**  **Enterprise** | **Identified Problem** | **Interventions** | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Title of OFT if any** | **Title of FLD if any** | **Number of Training (farmers)** | **Number of Training (Youths)** | **Number of Training (extension personnel)** | **Extension activities**  **(No.)** | **Supply of seeds (Qtl.)** | **Supply of planting materials (No.)** | **Supply of livestock (No.)** | **Supply of bio products** | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **No.** | **Kg** |
| 1 | Crop Improvement | Black pepper | Chengannoor is highly susceptible to quick wilt &  heavy dosage of fungicides | Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District | - | 5 | 0 | 0 | 0 | 0 | 0 | 0 | *Trichoderma harzianum*  Potassium phosphonate | 50 kg  7.5 L |
| 2 | Bio-Intensive Pest Management | Small Cardamom | Heavy infestation of stem and capsule borer leading to heavy usage of PPC | Assessment of different bio-pesticides and parasites against cardamom stem and capsule borer, *Conogethes punctiferalis* | - | 5 | 0 | 0 | 0 | 0 | 0 | 0 | *Bacillus thuringiensis*  *Beauveria bassiana*  *Apanteles*  *Friona* | 10 kg  20 kg  20000  20000 |
| 3 | Bio-Intensive Disease Management | Cowpea | Heavy dosage of fungicides are applied for the control of cowpea anthracnose | Biological control of cowpea anthracnose disease, *Colletotrichum destructivum* | - | 5 | 0 | 0 | 0 | 0 | 0 | 0 | *Pichia guilliermondii*  *Hanseniaspora uvarum*  *Trichoderma harzianum* | 12.5 L  12.5 L  12.5 Kg |
| 4 | IDM | Small Cardamom | *Fusarium oxysporum* diseases are often severe and wide spread and lead to crop losses in small cardamom are root tip rot and leaf yellowing pseudostem rot, panicle blight and rhizome rot. | - | Integrated Management for fusarium disease in small cardamom plantations | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Trichoderma  Pseudomonas | 50 L  50 L |
| 5 | Integrated Nutrient Management | Bitter gourd | Micronutrient deficiency | Assessment of the effect of zinc and Boron on the yield of bitter gourd in comparison with vegetable top-up | - | 1 | 0 | 0 | FAS-8  FV- 3 | 0 | 0 | 0 | - | - |
| 6 | Varietal Evaluation | Salad Cucumber | Non popularity of exotic vegetables and public sector varieties | Assessment of varieties of Salad cucumber  (*Brassica oleracea* var. italica) in polyhouse for high ranges | - | 0 | 0 | 0 | FAS-10  FV- 3 | 0.05 | 0 | 0 | - | - |
| 7 | Varietal Evaluation | Cassava | Non-availability of mosaic resistant varieties | Assessment of different varieties of tapioca for resistance of cassava mosaic virus disease in high ranges | - | 1 | 0 | 0 | FAS-6  FV- 4 | 0 | 0 | 0 | - | - |
| 8 | INM | Cardamom | Unscientific Nutrient Management | - | Integrated Nutrient Management in Cardamom | 5 | 0 | 0 | FAS-7  FV- 6 | 0 | 0 | 0 | - | - |
| 9 | Open precision farming | Bitter gourd | Inefficient water and fertilizer use. | - | Demonstration of open precision farming in bitter gourd | 0 | 2 | 0 | FAS-5  FV- 6 | 0.08 | 0 | 0 | - | 50 |
| 10 | Open precision farming | Strawberry | Inefficient water and fertilizer use  Fruit damage | - | Demonstration of low cost open precision farming in Strawberry *(Fragaria ananassa)* | 0 | 0 | 0 | FAS-5  FV- 2 | 0 | 0 | 0 | - | - |
| 11 | Crop diversification | Amorphoplallus | Non-availability of acrid free variety | - | Demonstration of Acrid free variety Gajendra of Amorphophallus in high ranges | 0 | 0 | 0 | FAS-8  FV- 3 | 0 | 50 kg | 0 | - | - |
| 12 | Crop diversification | Cassava | Non-availability of potassium efficient variety of Tapioca | - | Demonstration of potassium efficient variety of Tapioca -Sree Pavitra | 1 | 0 | 0 | FAS-5  FV- 3 | 0 | 200 sets | 0 | - | - |
| 13 | INM | Banana | Unscientific Nutrient Management | **-** | Demonstration of Ayar in Banana | 1 | **0** | **0** | FAS-4  FV- 2 | **0** | **0** | **0** | **-** | **-** |
| 14 | Crop improvement | Black Pepper | Dearth of adequate quality planting materials | **-** | Column Method for production of quality planting materials in Black Pepper | 1 | 0 | 0 | FAS-8  FV- 5 | 0 | 0 | 0 | - | **-** |
| 15 | Crop improvement | Ginger | High cost and scarcity of seed material of HYVs. | **-** | Improved soil less method (Protray) for production of healthy planting material of ginger | 1 | 1 | 0 | FAS-4  FV- 1 | 0 | 500 | 0 | 9 litres | **-** |
| 16 | Crop Management | Mushroom | Unscientific disposal of Spent mushroom compost | **-** | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | 2 | 2 | 0 | FAS-10  FV- 8 | 0 | 200 | 0 | - | **-** |
| 17 | Kitchen waste management | - | Improper kitchen waste management | - | Low cost bio-compost bin for kitchen waste management | 0 | 2 | 0 | 4 | - | - | - | EM Solution - 8 litre  Bio compost bin – 4 Nos. | - |
| 18 | Value addition | Rose apple | Fruit wastage | - | Product diversification in rose apple to reduce wastage and increase additional income | 0 | 2 | 0 | 6 | - | - | - | - | - |
| 19 | Fodder production | Mixed fodder | Shortage of fodder | - | Demonstration of fodder cafeteria in rural households of Idukki district | 4 | 0 | 0 | Field visit-3  Method demonstration -2 | Sorghum-7kg  Hedge Lucerne-2kg  Agathi-3kg  Maize-25kg  Stylo-1kg | - | - | - | - |
| 20 | Disease management | Hybrid dairy cattle | Occurrence of mastitis disease | Assessment of different methods of prophylactic management of udder oedema disease in dairy animals | - | 3 | 0 | 0 | Field visit-3  Method demonstration-2 | - | - | - | - | - |
| 21 | Disease management | Hybrid poultry | Occurrence of Ranikhet disease | - | Prophylactic management of New castle disease in poultry using oral pellet vaccine | 3 | 0 | 0 | Field visit-3 | - | - | - | - | - |
| 22 | Evaluation of Breeds | Vigova Duck | Unawareness about new breeds | - | Demonstration of Vigova super M duck in backyard system | 3 | 0 | 0 | Field visit-3 | - | - | - | - | - |

**3.B2. Details of technology used during reporting period**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Title of Technology** | **Source of technology** | **Crop/enterprise** | **No. of programmes conducted** | | | |
| **OFT** | **FLD** | **Training** | **Others (Specify)** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 1 | Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District | IISR & Farmers Developed Variety | Black Pepper | 5 | 0 | 3 | FAS - 7  Field Visits - 8  Diagnostic Visits - 2  Method Demo - 5 |
| 2 | Assessment of different bio-pesticides and parasites against cardamom stem and capsule borer, *Conogethes punctiferalis* | ICRI & NBAIR | Small Cardamom | 5 | 0 | 6 | FAS - 5  Field Visits - 12  Diagnostic Visits - 2  Method Demo - 5 |
| 3 | Biological control of cowpea anthracnose disease, *Colletotrichum destructivum* | NBAIR | Cowpea | 5 | 0 | 3 | FAS - 16  Field Visits - 16  Diagnostic Visits - 4  Method Demo - 5 |
| 4 | Integrated Management for fusarium disease in small cardamom plantations | ICRI | Small Cardamom | 0 | 16 | 22 | FAS - 45  Field Visits - 8  Diagnostic Visits - 10  Method Demo - 10 |
| 5 | Assessment of the effect of zinc and Boron on the yield of bitter gourd in comparison with vegetable top-up | KAU | Bitter gourd | 5 | 0 | 1 | FAS-8  FV- 3 |
| 6 | Assessment of varieties of Salad cucumber  (*Brassica oleracea* var. italica) in polyhouse for high ranges | KAU | Salad Cucumber | 5 | 0 | 1 | FAS-10  FV- 3 |
| 7 | Assessment of different varieties of tapioca for resistance of cassava mosaic virus disease in high ranges | CTCRI | Cassava | 5 |  | 1 | FAS-6  FV- 4 |
| 8 | Integrated Nutrient Management in Cardamom | ICRI | Cardamom | 0 | 10 | 5 | FAS-7  FV- 6 |
| 9 | Demonstration of open precision farming in bitter gourd | KAU | Bittergourd | 0 | 03 | 2 | FAS-5  FV- 6 |
| 10 | Demonstration of low cost open precision farming in Strawberry *(Fragaria ananassa)* | KAU | Strawberry | 0 | 03 | 0 | FAS-5  FV- 2 |
| 11 | Demonstration of Acrid free variety Gajendra of Amorphophallus in high ranges | CTCRI & APAU | Amorphophallus | 0 | 10 | 0 | FAS-8  FV- 3 |
| 12 | Demonstration of potassium efficient variety of Tapioca -Sree Pavitra | CTCRI | Cassava | 0 | 10 | 1 | FAS-5  FV- 3 |
| 13 | Demonstration of Ayar in Banana | KAU | Banana | 0 | 10 | 1 | FAS-4  FV- 2 |
| 14 | Column Method for production of quality planting materials in Black Pepper | IISR | Black Pepper | 0 | 03 | 1 | FAS-8  FV- 5 |
| 15 | Improved soil less method (Protray) for production of healthy planting material of ginger | KAU & IISR | Ginger | 0 | 03 | 2 | FAS-4  FV- 1 |
| 16 | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | KAU & TNAU | Mushroom | 0 | 05 | 4 | FAS-10  FV- 8 |
| 17 | Low cost bio – compost bin for kitchen waste management | Innovative technology by Mr. V. P. Davis, Chalakkudy | - | 0 | 1 | 2 | FAS - 6  Field Visits - 8  Diagnostic Visits - 0  Method Demo - 10 |
| 18 | Product diversification in rose apple for reduced wastage and increased additional income | KAU | Rose apple | 0 | 1 | 2 | FAS - 20  Field Visits - 6  Diagnostic Visits - 0  Method Demo-3 |
| 19 | Assessment of different methods of prophylactic management of udder oedema disease in dairy animals | TANUVAS & KVASU | Hybrid dairy cattle | 1 | 0 | 3 | Field visit-3  Method demo-2 |
| 20 | Popularization of fodder cafeteria in rural households of Idukki district | TNAU &KAU | Mixed Fodder | 0 | 1 | 4 | Field visit-3  Method demo-2 |
| 21 | Demonstration of Vigova super M duck inj backyard system | CPDO,,Hessaraghatta | Poultry-Duck | 0 | 1 | 3 | Field visit-3 |
| 22 | Prophylactic management of New castle disease in poultry using oral pellet vaccine | TANUVAS | Hybrid poultry | 0 | 1 | 3 | Field visit-3 |

**3.B2 contd..**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No. of farmers covered** | | | | | | | | | | | | | | | | |
| **OFT** | | | | | **FLD** | | | | **Training** | | | | **Others (Specify)** | | | |
| **General** | | | **SC/ST** | | **General** | | **SC/ST** | | **General** | | **SC/ST** | | **General** | | **SC/ST** | |
|  | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** |
|  | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** |
| 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 68 | 21 | 6 | 8 | 0 | 0 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 25 | 21 | 4 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 0 | 0 | 0 | 0 | 7 | 3 | 1 | 2 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 27 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 61 | 32 | 12 | 8 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 26 | 32 | 12 | 3 | 0 | 0 | 0 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 22 | 28 | 2 | 4 | 0 | 0 | 0 | 0 |
| 19 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 47 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | 0 | 0 | 0 | 0 | 4 | 6 | 0 | 0 | 18 | 49 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 | 0 | 0 | 0 | 0 | 6 | 4 | 0 | 0 | 48 | 68 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 4 | 6 | 0 | 0 | 34 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |

**PART IV - On Farm Trial**

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Cereals** | **Oilseeds** | **Pulses** | **Commercial Crops** | **Vegetables** | **Fruits** | **Flower** | **Plantation crops** | **Tuber Crops** | **TOTAL** |
| Integrated Nutrient Management |  |  |  |  | 1 |  |  |  |  | 1 |
| Varietal Evaluation |  |  |  |  | 1 |  |  |  | 1 | 2 |
| Integrated Pest Management |  |  | 1 |  |  |  |  | 1 |  | 2 |
| Integrated Crop Management |  |  |  |  |  |  |  | 1 |  | 1 |
| Integrated Disease Management |  |  |  |  |  |  |  | 1 |  | 1 |
| Small Scale Income Generation Enterprises |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  |  |  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |  |  |  |  |  |
| Storage Technique |  |  |  |  |  |  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  | **1** |  | **2** |  |  | **3** | **1** | **7** |

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

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

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

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technology assessed** | **No. of trials** | **Number of farmers** | **Area in ha (Per trail covering all the Technological Options)** |
| Integrated Nutrient Management | Bitter gourd | Assessment of the effect of zinc and Boron on the yield of bitter gourd in comparison with vegetable top-up | 15 | 5 | 0.12 |
|  |  |  |  |  |
| Varietal Evaluation | Black pepper | Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District | 5 | 5 | 0.2 |
| Salad Cucumber | Assessment of varieties of Salad cucumber  (Brassica oleracea var. italica) in polyhouse for high ranges | 10 | 5 | 0.02 |
| Cassava | Assessment of different varieties of tapioca for resistance of cassava mosaic virus disease in high ranges | 20 | 5 | 0.06 |
| Integrated Pest Management | Small Cardamom | Assessment of different bio-pesticides and parasites against cardamom stem and capsule borer , *Conogethes punctiferalis* | 5 | 5 | 0.50 |
| Integrated Crop Management |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Disease Management | Cowpea | Biological control of cowpea anthracnose disease, *Colletotrichum destructivum* | 5 | 5 | 0.02 |
|  |  |  |  |  |
| 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** |  |  | **60** | **30** | **0.92** |

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Thematic areas** | **Name of the livestock enterprise** | **Name of the technology assessed** | **No. of trials** | **No. of farmers** |
| Evaluation of breeds |  |  |  |  |
| Nutrition management |  |  |  |  |
| Disease management | Dairy Cattle | Assessment of different methods of prophylactic management of udder oedema disease in dairy animals | 5 | 5 |
| Value addition |  |  |  |  |
| Production and management |  |  |  |  |
| Feed and fodder |  |  |  |  |
| Small scale income generating enterprises |  |  |  |  |
| **Total** | | | **5** | **5** |

**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 |
| Black pepper | Perennial | Chengannoor is highly susceptible to quick wilt &  heavy dosage of fungicides | Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District. | 5 | 1.Farmers practice (Chengannoor)  2.IISR Thevam  3.Aswathi  4.Suvarna | % reduction in quick wilt incidence | - | IISR-Thevam is showing least percentage of quick wilt | IISR-Thevam is showing least percentage of quick wilt disease incidence compared to farmer developed varieties and check | - | - |
| Small cardamom | Perennial | Heavy infestation of stem and capsule borer leading to heavy usage of PPC | Assessment of different bio-pesticides and parasites against cardamom stem and capsule borer , *Conogethes punctiferalis* | 5 | 1. Farmers practice (Recommended Insecticides )  2. Spray of *Bacillus thuringiensis* @ 2g/L  3. Spray of *Beauveria bassiana* @ 5g/L  4. Release of Apanteles sp @ 20,000/ha  5. Release of Friona sp @ 20,000/ha | % reduction over control  &% parasitism | - | Bacillus thuringiensis var Kurstaki sprays in combination with the releases of parasites Apanteles sp and Friona sp gave effective control of stem and capsule borer | *Bacillus thuringiensis* var *Kurstaki* was also found to be effective when combination with *Beauveria bassiana.* | - | - |
| Cowpea |  | Heavy dosage of fungicides are applied for the control of cowpea anthracnose | Biological control of cowpea anthracnose disease, *Colletotrichum destructivum* | 5 | 1. Farmers practice (Recommended Fungicides)  2. *Pichia guilliermondii*  (NBAIR Strains)@10ml/L  3. *Hanseniaspora uvarum*  (NBAIR Strains) @10ml/L  4. *Trichoderma harzianum*  (NBAIR Strains) @10g/L | % reduction in anthracnose incidence | - | - | *Hanseniaspora uvarum* showing least percentage of anthracnose disease incidence | - | - |
| Bitter gourd | Commercial | Micronutrient deficiency | Assessment of the effect of zinc and Boron on the yield of bitter gourd in comparison with vegetable top-up | 5 | TO1 - No micronutrient application (FP)  TO2 - Application of ZnSO4 (0.5%) + Boron (0.1%) based on soil test along with recommended dose of NPK  TO3 - Foliar spray of micronutrient top up at 30, 45, 60 days after sowing along with recommended dose of NPK | 1. No of days for attaining first flowering  2. Girth of the plant  3. Ht of the plant  4. Yield (kg/ha) | TO1- 52 days  TO2 - 41 days  TO3 - 38 days  TO1 – 1.0 cm  TO2 – 1.2 cm  TO3 – 1.2 cm  TO1 – 2.0 m at 50 DAP  TO2 – 2.1 m at 50 DAP  TO3 – 2.3 m at 50 DAP  Crop not over | Earliness in female flower initiation in TO3  No significant difference  No significant difference  Gross yield is expected to be increased in TO3 | Better crop stand in TO3 and Gross yield is expected to be increased | - | - |
| Salad Cucumber | Commercial | Non popularity of exotic vegetables and public sector varieties | Assessment of varieties of Salad cucumber  (*Brassica oleracea* var. italica) in polyhouse for high ranges | 5 | TO1 - Kiyan  TO2 - KPCH-1 | 1. Germination percentage  2. Days to flower bud initiation  3. Days to harvesting  4. Weight of the fruit (g)  5. Yield (kg/ha) | TO1 - 100  TO2 – 98  TO1 - 24  TO2 –14  TO1 - 44  TO2 –37  TO1 - 198  TO2 – 232  TO1 - 65500  TO2 -98500 | TO1 - Kiyan  TO2 - KPCH-1 | - | - | - |
| Cassava | Commercial | Non-availability of mosaic resistant varieties | Assessment of different varieties of tapioca for resistance of cassava mosaic virus disease in high ranges | 5 | TO1 – Local Variety (FP)  TO2 – Sree Jaya  TO3 – Vellayani Hraswa  TO4 – Suvarna | 1. Average weight of tuber  2. Yield (kg/ha) | Observations not over for all the varieties | - | *-* | - | - |
| Dairy cattle | Homestead | Occurrence of Mastitis disease | Assessment of different methods of prophylactic management of udder oedema disease in dairy animals | 5 | Assessment of different methods of prophylactic management of udder oedema disease in dairy animals | 1)Incidence of Oedema disease  2) Quantity of milk production(3 month lactation period)  3) Quality of milk production | T1: 25  T2: 0  T3: 0  T1: 1350  T2: 1620  T3: 1980  T1: 3  T2: 3.2  T3: 4.2 | Dipol solution & Premast powder was found effective for prevention and control of mastitis disease | Well adapted for High range condition & produce more milk production | - | - |

**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 - Chengannoor) | - | kg/ha | 680 | 75000 | 1.35 |
| Technology option 2 (IISR Thevam) | IISR | kg/ha | 1110 | 222000 | 2.55 |
| Technology option 3 (Aswathi) | Farmers Developed variety | kg/ha | 840 | 169000 | 2.05 |
| Technology option 4 (Suvarna) | Farmers Developed variety | kg/ha | 790 | 152000 | 1.88 |
| Technology option 1 (Spray of *Bacillus thuringiensis* ) | ICRI & NBAIR | kg/ha | 750 | 262000 | 1.75 |
| Technology option 2 (Spray of *Beauveria bassiana*) | ICRI & NBAIR | kg/ha | 820 | 438000 | 2.46 |
| Technology option 3 (Release of Apanteles sp ) | ICRI & NBAIR | kg/ha | 710 | 309000 | 1.94 |
| Technology option 4 (Release of Friona sp) | ICRI & NBAIR | kg/ha | 690 | 261000 | 1.73 |
| Technology option 1 (Recommended Fungicides) | - | kg/ha | 510 | 15000 | 1.08 |
| Technology option 2 (*Pichia guilliermondii*) | NBAIR | kg/ha | 810 | 125000 | 1.78 |
| Technology option 3 (*Hanseniaspora uvarum*) | NBAIR | kg/ha | 900 | 169000 | 2.20 |
| Technology option 4 (*Trichoderma harzianum*) | NBAIR | kg/ha | 760 | 153000 | 1.89 |
| Technology option 1 (Farmer’s Practice - ) | - | Crop not over | 0 | 0 | 0 |
| Technology option 2 ( ) | KAU | Crop not over | 0 | 0 | 0 |
| Technology option 3 ( ) | IIHR | Crop not over | 0 | 0 | 0 |
| Technology option 1 (Farmer’s Practice - ) | Nil | 0 | 0 | 0 | 0 |
| Technology option 2 ( ) | Nunhems | 655kg/100m2 | 65500kg/ha | 0 | 0 |
| Technology option 3 ( ) | KAU | 985kg/100m2 | 98500kg/ha | 0 | 0 |
| Technology option 1 (Farmer’s Practice - ) | - | - | - | 0 | 0 |
| Technology option 2 ( ) | - | - | - | 0 | 0 |
| Technology option 3 ( ) | - | - | - | 0 | 0 |
| Technology option 1 (Farmer’s Practice - Chalk powder mixed with Lemon juice & Redovet powder mixed with Egg white) | - | 395 | lit/animal | 3200/- | 1.25 |
| Technology option 2 (Premast powder 50 g daily for 20 days before and after calving) | TANUVAS | 531 | lit/animal | 5740/- | 1.36 |
| Technology option 3 (20 ml of Dipol Solution mixed with 1 litre of water by using Teat Cup for teat dipping) | TANUVAS & KVASU | 621 | lit/animal | 9160/- | 1.53 |

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 of suitable Black Pepper Foot rots (Quick wilt) resistant variety for Idukki District**

2 Problem Definition: Chengannoor is highly susceptible to quick wilt & heavy dosage of fungicides

3 Details of technologies selected for assessment:

1) Farmers practice (Chengannoor) 2) IISR Thevam 3) Aswathi 4) Suvarna

4 Source of technology: IISR & Farmers Developed variety

5 Production system and thematic area: Varietal evaluation

6 Performance of the Technology with performance indicators: IISR-Thevam is showing least percentage of quick wilt

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

techniques: Nil

8 Final recommendation for micro level situation: IISR-Thevam suitable for high range area

9 Constraints identified and feedback for research: Nil

10 Process of farmers participation and their reaction: Nil

**2)**

1 Title of Technology Assessed: **Assessment of different bio-pesticides and parasites against small cardamom stem and capsule borer, *Conogethes punctiferalis***

2 Problem Definition: Heavy infestation of stem and capsule borer leading to heavy usage of PPC

3 Details of technologies selected for assessment:

Spray of *Bacillus thuringiensis* @ 2g/L,

Spray of *Beauveria bassiana* @ 5g/L,

Release of Apanteles sp @ 20,000/ha and Release of Friona sp @ 20,000/ha

4 Source of technology: ICRI & NBAIR

5 Production system and thematic area: Bio-intensive pest management

6 Performance of the Technology with performance indicators: Nil

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

techniques: Nil

8 Final recommendation for micro level situation: Nil

9 Constraints identified and feedback for research: Nil

10 Process of farmers participation and their reaction: Nil

**3)**

1 Title of Technology Assessed: **Biological control of cowpea anthracnose disease, *Colletotrichum destructivum***

2 Problem Definition: Heavy dosage of fungicides are applied for the control of cowpea anthracnose

3 Details of technologies selected for assessment:

Farmers practice (Recommended Fungicides)

*Pichia guilliermondii* (NBAIR Strains)@10ml/L

*Hanseniaspora uvarum* (NBAIR Strains) @10ml/L

*Trichoderma harzianum* (NBAIR Strains) @10g/

4 Source of technology: NBAIR

5 Production system and thematic area: Bio-intensive disease management

6 Performance of the Technology with performance indicators: Nil

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

techniques: Nil

8 Final recommendation for micro level situation: *Hanseniaspora uvarum* showing least percentage

of anthracnose disease

9 Constraints identified and feedback for research: Nil

10 Process of farmers participation and their reaction: Nil

**4)**

1 Title of Technology Assessed: **Assessment of the effect of zinc and Boron on the yield of bitter**

**gourd in comparison with vegetable top-up**

2 Problem Definition: Micronutrient deficiency.

3 Details of technologies selected for assessment:

TO1 - No micronutrient application (FP).

TO2 - Application of ZnSO4 (0.5%) + Boron (0.1%) based on soil test along with recommended dose of NPK.

TO3 - Foliar spray of micronutrient top up at 30, 45, 60 days after sowing along with recommended dose of NPK.

4 Source of technology: KAU & IIHR.

5 Production system and thematic area: Commercial & Integrated Nutrient Management.

6 Performance of the Technology with performance indicators:

a. No of days for attaining first flowering - Earliness in female flower initiation in TO3

b. Girth of the plant - No significant difference

c. Ht of the plant - No significant difference

d. Yield (kg/ha) - Gross yield is expected to be increased in TO3 as the crop is not over

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

techniques: Better crop stand in TO3 and Gross yield is expected to be increased.

8 Final recommendation for micro level situation: Crop is not over.

9 Constraints identified and feedback for research: Nil.

10 Process of farmers participation and their reaction: Nil.

**5)**

1 Title of Technology Assessed: **Assessment of varieties of Salad cucumber (*Brassica oleracea var. italica*) in poly house for high ranges**.

2 Problem Definition: Non popularity of exotic vegetables and public sector varieties.

3 Details of technologies selected for assessment:

TO1 - Nil

TO2 - Kiyan

TO3 - KPCH-1

4 Source of technology: Nunhems & KAU.

5 Production system and thematic area: Commercial & Varietal Evaluation.

6 Performance of the Technology with performance indicators:

a. Germination percentage : TO1-100% & TO2-98%

b. Days to flower bud initiation: TO1-24 & TO2-14

c. Days to harvesting: TO1-44 & TO2-37

d. Weight of the fruit (g): TO1-198 & TO2-232

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

techniques: KPCH-1 is a good variety which gets an equal consumer acceptance when compared to Kiyan and has a better keeping quality.

8 Final recommendation for micro level situation: An even better option for hybrid poly house cucumbers from the public sector.

9 Constraints identified and feedback for research: Nil.

10 Process of farmers participation and their reaction: Nil.

**6)**

1 Title of Technology Assessed: **Assessment of different varieties of tapioca for resistance of cassava mosaic virus disease in high ranges**.

2 Problem Definition: Non-availability of mosaic resistant varieties.

3 Details of technologies selected for assessment:

TO1 – Local Variety (FP)

TO2 – Sree Jaya

TO3 – Vellayani Hraswa

TO4 – Suvarna

4 Source of technology: KAU & CTCRI.

5 Production system and thematic area: Commercial & Varietal Evaluation.

6 Performance of the Technology with performance indicators:

a. Average weight of tuber

b. Yield (kg/ha)

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

techniques:

8 Final recommendation for micro level situation: Nil.

9 Constraints identified and feedback for research: Nil.

10 Process of farmers participation and their reaction: Nil.

**7)**

1 Title of Technology Assessed: **Assessment of different methods of prophylactic management of**

**Udder oedema disease in dairy animals**

2 Problem Definition: Occurrence of mastitis disease.

3 Details of technologies selected for assessment: Premast powder 50 g daily for 20 days before and after calving. 20 ml of Dipol Solution mixed with 1 litre of water by using Teat Cup for teat dipping.

4 Source of technology: TANUVAS & KVASU.

5 Production system and thematic area: Disease management.

6 Performance of the Technology with performance indicators: Very good Effect.

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

techniques: Nil.

8 Final recommendation for micro level situation: Well adapted for High range condition & produce more milk production.

9 Constraints identified and feedback for research: Non awareness and negligence.

10 Process of farmers participation and their reaction: Well adapted for High range condition & produce more milk production.

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

4. D.2. Details of each On Farm Trial for refinement: Nil.

**PART V - FRONT LINE DEMONSTRATIONS**

**5. A. Summary of FLDs implemented during 2016-17**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No. | Category | Farming  Situation | Season  and  Year | Crop | Variety/ breed | Hybrid | Thematic area | Technology Demonstrated | Area (ha) | | No. of farmers/  demonstration | | | Reasons for shortfall in achievement |
| Proposed | Actual | SC/ST | Others | Total |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Pulses |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Millets |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Vegetables | Commercial | Annual | Bittergourd | Local | - | Water & fertilizer use efficiency | Demonstration of open precision farming in bitter gourd | 0.6 | 0.6 |  | 3 | 3 | - |
| 5.a. |  | Homestead | - | - | - | - | Kitchen waste management | Low cost bio – compost bin for kitchen waste management | 4 units | 4 units | 0 | 4 | 4 | - |
| 6 | Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Fruit | Commercial | Annual | Strawberry | Local | - | Water & fertilizer use efficiency | Demonstration of low cost open precision farming in Strawberry *(Fragaria ananassa)* | 0.03 | 0.03 |  | 3 | 3 | - |
| Commercial | Annual | Banana | Nendran | - | Integrated Nutrient Management | Demonstration of Ayar in Banana | 0.025 | 0.025 |  | 10 | 10 | - |
| Homestead | - | Rose apple | local | - | Value addition | Product diversification in rose apple to reduce wastage and increase additional income | 6 units | 6 units | 0 | 6 | 6 | - |
| 9 | Spices and condiments | Perennial | - | Small cardamom | Njallani | - | IDM | Integrated management of Fusarium disease in small cardamom | 2 | 2 | - | 10 | 10 | - |
| 9.a. |  | Commercial | Perennial | Cardamom | Njallani | - | INM | Integrated Nutrient Management in Cardamom | 1.0 | 1.0 |  | 10 | 10 | - |
| 9.b. |  | Commercial | Perennial | Black Pepper | Karimunda | - | Crop improvement | Column Method for production of quality planting materials in Black Pepper | 3 | 3 |  | 3 | 3 | - |
| 9.c. |  | Commercial | Perennial | Ginger | Any | - | Crop improvement | Improved soil less method (Protray) for production of healthy planting material of ginger | 0.012 | 0.012 |  | 3 | 3 | - |
| 10 | Commercial crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Dairy | Mixed Farming | Throughout the year | Dairy Cattle | Jersey and HF | Cross bred | Feed and Fodder | Demonstration of fodder Cafeteria in rural households of Idukki District | 0.5 ha | 0.5 ha | 0 | 5 | 5 | - |
| 16 | Poultry | Mixed Farming | Throughout the year | Poultry | Chicken | Hybrid poultry | Scientific Disease management | Prophylactic management of Newcastle Disease in poultry using oral pellet vaccine | 10 | 10 | 0 | 10 | 10 | - |
| 17 | Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Duckery | Mixed Farming | Throughout the year | Poultry | Vigova Duck | Hybrid breed | Evaluation of breeds | Demonstration of Vigova super M Duck in backyard system | 10 | 10 | 0 | 10 | 10 | - |
| 21 | Common carps |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Mussels |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | Ornamental fishes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | Vermicompost | Commercial | Perennial | Spent Mushroom Compost | Oyster mushroom | - | Crop Management | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | 5 | 5 |  | 5 | 5 | - |
| 27 | Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 | Implements |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Others (Tuber Crops) | Commercial | Annual | Amorphophallus | Gajendra |  | Varietal introduction | Demonstration of Acrid free variety Gajendra of Amorphophallus in high ranges | 0.04 | 0.04 |  | 10 | 10 | - |
| 31 | Others (Tuber Crops) | Commercial | Annual | Tapioca | Sree Pavitra |  | Varietal introduction | Demonstration of potassium efficient variety of Tapioca -Sree Pavitra | 0.04 | 0.04 |  | 10 | 10 | - |
| 32 | Others (specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |

**5. A. 1. Soil fertility status of FLDs plots during 2016-17**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No. | Category | Farming  Situation | Season  and  Year | Crop | Variety/ breed | Hybrid | Thematic area | Technology Demonstrated | Season and year | Status of soil | | | Previous crop grown | |
| N | P | K | |  |
| 1 | Oilseeds |  |  |  |  |  |  |  |  |  |  |  | |  |
| 2 | Pulses |  |  |  |  |  |  |  |  |  |  |  | |  |
| 3 | Cereals |  |  |  |  |  |  |  |  |  |  |  | |  |
| 4 | Millets |  |  |  |  |  |  |  |  |  |  |  | |  |
| 5 | Vegetables | Commercial | Annual | Bitter gourd | Local |  | Water & fertilizer use efficiency | Demonstration of open precision farming in bitter gourd | Summer | M | H | M | | Snake gourd |
| 6 | Flowers |  |  |  |  |  |  |  |  |  |  |  | |  |
| 7 | Ornamental |  |  |  |  |  |  |  |  |  |  |  | |  |
| 8 | Fruit | Commercial | Annual | Strawberry | Local |  | Water & fertilizer use efficiency | Demonstration of low cost open precision farming in Strawberry *(Fragaria ananassa)* | Winter | M | M | M | | **-** |
| 9 |  | Commercial | Annual | Banana | Nendran |  | Integrated Nutrient Management | Demonstration of Ayar in Banana | Rainfed | M | H | M | | **-** |
| 10 | Spices and condiments | Commercial | Perennial | Cardamom | Njallani |  | INM | Integrated Nutrient Management in Cardamom | Yearround | M | H | H | | **-** |
| 11 |  | Commercial | Perennial | Black Pepper | Any |  | Crop improvement | Column Method for production of quality planting materials in Black Pepper | Yearround | M | M | M | | **-** |
| 12 |  | Commercial | Perennial | Ginger | Any |  | Crop improvement | Improved soil less method (Protray) for production of healthy planting material of ginger | Summer | - | - | - | | - |
| 13 | Commercial crops |  |  |  |  |  |  |  |  |  |  |  | |  |
| 14 | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  | |  |
| 15 | Fodder |  |  |  |  |  |  |  |  |  |  |  | |  |
| 16 | Plantation |  |  |  |  |  |  |  |  |  |  |  | |  |
| 17 | Fibre |  |  |  |  |  |  |  |  |  |  |  | |  |
| 18 | Others (Tubers) | Commercial | Annual | Amorphophallus | Gajendra |  | Varietal introduction | Demonstration of Acrid free variety Gajendra of Amorphophallus in high ranges | Rainfed | M | H | H | | - |
| 19 | Others (Tubers) | Commercial | Annual | Tapioca | Sree Pavitra |  | Varietal introduction | Demonstration of potassium efficient variety of Tapioca -Sree Pavitra | Summer | M | H | H | | - |
| 20 | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  | |  |

**5. B. Results of Frontline Demonstrations**

**5. B.1. Crops**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop | Name of the technology demonstrated | Variety | Hybrid | Farming situation | No. of Demo. | Area  (ha) | Yield (q/ha) | | | | % Increase | \*Economics of demonstration (Rs./ha) | | | | \*Economics of check  (Rs./ha) | | | |
| Demo | | | Check | Gross  Cost | Gross  Return | Net Return | \*\*  BCR | Gross  Cost | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  |  |  | H | L | A |  |  |  |  |  |  |  |  |  |  |
| Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pulses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cereals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Millets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vegetables | Demonstration of open precision farming in bitter gourd | Local |  | Summer | 3 | 0.6 | 2000 | 1860 | 1930 | 1774 | 8.8 | 164700 | 253840 | 89140 | 1.54 | 115000 | 150000 | 35000 | 1.30 |
| Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit | Demonstration of low cost open precision farming in Strawberry *(Fragaria ananassa)* | - | - | Winter | 3 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | Demonstration of Ayar in Banana | - | - | Rainfed | 10 | 0.025 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Spices and condiments | Integrated Management for fusarium disease in small cardamom plantations | Njallani | - | Irrigated | 10 | 2 | 110 | 85 | 91 | 81 | 54 | 285000 | 465000 | 180000 | 1.631 | 300000 | 394000 | 94000 | 1.31 |
|  | Integrated Nutrient Management in Cardamom | Njallani |  | Year round | 10 | 1 | 9.8 | 10.0 | 9.9 | 8.0 | 25.0 | 250000 | 653600 | 403600 | 2.6 | 218000 | 414200 | 196200 | 1.90 |
|  | Column Method for production of quality planting materials in Black Pepper | Karimunda |  | Year round | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | Improved soil less method (Protray) for production of healthy planting material of ginger | Any |  | Summer | 3 | 0.012 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre crops like cotton |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify) | Low cost bio compost bin for kitchen waste management | - | - | - | 4 | 4 | - | - | - | - | - | 4100 | 6400 | 2300 | 1.56 | - | - | - | - |
| Others (pl. specify) | Product diversification in rose apple to reduce wastage and increase additional income | Local | - | - | 6 | 6 | - | - | - | - | - | 1070 | 1640 | 570 | 1.53 | 305 | 350 | 45 | 1.14 |
| Others (pl. specify) | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production | Local | - | Homstead farming | 5 | 0.08 | 0.98 | 0.79 | 0.84 | Not practiced | Not practiced | 1690.66 | 3435.5 | 1744.84 | 2.03 | Not practiced |  |  |  |
| Others (Tuber crops) | Demonstration of Acrid free variety Gajendra of Amorphophallus in high ranges | Gajendra |  | Commercial | 10 | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Others (Tuber crops) | Demonstration of potassium efficient variety of Tapioca -Sree Pavitra | Sree Pavitra |  | Commercial | 10 | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

\*\* BCR= GROSS RETURN/GROSS COST

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

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

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

5. B.2. Livestock and related enterprises

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of livestock** | **Name of the technology demonstrated** | **Breed** | **No. of Demo** | **No.**  **of Units** | **Yield (q/ha)** | | | | **% Increase** | **\*Economics of demonstration Rs./unit)** | | | | **\*Economics of check**  **(Rs./unit)** | | | |
| **Demo** | | | **Check if any** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** |
|  |  |  |  |  | **H** | **L** | **A** |  |  |  |  |  |  |  |  |  |  |
| Dairy | Demonstration of Fodder Cafetaria in rural households of Idukki district. | Dairy Cows | 10 | 10 | 18 | 13 | 15 | 14 | 7.14 | 13610 | 30420 | 16810 | 2.24 | 14600 | 23940 | 8230 | 1.63 |
| Poultry | Prophylactic management of Newcastle Disease in poultry using oral pellet vaccine | Hybrid poultry | 10 | 10 | 23 | 19 | 20 | 18 | 11.11 | 400 | 788 | 388 | 1.99 | 219 | 357 | 138 | 1.63 |
| Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duckery | Demonstration of Vigova super M duck in backyard system | Vigova Super M Duck breed | 10 | 10 | 23 | 19 | 20 | 18 | 11.11 | 1899 | 5470 | 3571 | 2.85 | 1025 | 2594 | 1569 | 2.45 |
| 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

5. B.3. Fisheries: Nil.

5. B.4. Other enterprises: Nil.

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Activity** | **No. of activities organised** | **Number of participants** | **Remarks** |
| 1 | Field days | 2 | 46 | - |
| 2 | Farmers Training | 14 | 184 | - |
| 3 | Media coverage | 4 | - | - |
| 4 | Training for extension functionaries | 0 | 0 | - |
| 5 | Others (Please specify) |  |  |  |

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS:** Nil.

**PART VII. TRAINING**

**7.A.. Training of Farmers and Farm Women including sponsored training programmes (On campus)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 1 | 14 | 0 | 14 | 0 | 0 | 0 | 14 | 0 | 14 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Organic farming in vegetable) | 2 | 75 | 14 | 89 | 0 | 0 | 0 | 75 | 14 | 89 |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (Specify) |  |  |  |  |  |  |  |  |  |  |
| Others (ICM in Vegetable crops) |  |  |  |  |  |  |  |  |  |  |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit |  |  |  |  |  |  |  |  |  |  |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management |  |  |  |  |  |  |  |  |  |  |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management |  |  |  |  |  |  |  |  |  |  |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 1 | 7 | 10 | 17 | 0 | 0 | 0 | 7 | 10 | 17 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening |  |  |  |  |  |  |  |  |  |  |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet |  |  |  |  |  |  |  |  |  |  |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Women empowerment |  |  |  |  |  |  |  |  |  |  |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts | 4 | 0 | 23 | 23 | 0 | 35 | 35 | 0 | 58 | 58 |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Processing and Packaging of Mushroom) |  |  |  |  |  |  |  |  |  |  |
| **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 |  |  |  |  |  |  |  |  |  |  |
| 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 | 2 | 93 | 0 | 93 | 9 | 2 | 11 | 102 | 2 | 104 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| 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** | **10** | **189** | **47** | **236** | **9** | **37** | **46** | **198** | **84** | **282** |

**7.B Training of Farmers and Farm Women including sponsored training programmes (Off campus)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management (Spices) |  |  |  |  |  |  |  |  |  |  |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (Specify) |  |  |  |  |  |  |  |  |  |  |
| Others (ICM in vegetables) | 5 | 176 | 52 | 228 | 80 | 16 | 96 | 256 | 68 | 324 |
| Others (Organic farming-Vegetables) | 11 | 335 | 176 | 511 | 133 | 44 | 177 | 468 | 220 | 688 |
| **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) |  |  |  |  |  |  |  |  |  |  |
| Others (Crop diversification) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management |  |  |  |  |  |  |  |  |  |  |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Soil Conservation) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management | 3 | 52 | 30 | 82 | 0 | 0 | 0 | 52 | 30 | 82 |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening |  |  |  |  |  |  |  |  |  |  |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet |  |  |  |  |  |  |  |  |  |  |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking (workshop) | 1 | 2 | 6 | 8 | 1 | 16 | 17 | 3 | 22 | 25 |
| Gender mainstreaming through SHGs | 1 | 4 | 8 | 12 | 0 | 0 | 0 | 4 | 8 | 12 |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition | 3 | 4 | 67 | 71 | 0 | 4 | 4 | 4 | 71 | 75 |
| Women empowerment | 2 | 9 | 18 | 27 | 0 | 8 | 8 | 9 | 26 | 35 |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts | 5 | 0 | 44 | 44 | 0 | 52 | 52 | 0 | 96 | 96 |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (Industry training on food processing) | 1 | 9 | 24 | 33 | 0 | 0 | 0 | 9 | 24 | 33 |
| Others (Processing & popularization of Jack fruit) |  |  |  |  |  |  |  |  |  |  |
| **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 | 3 | 94 | 27 | 121 | 0 | 0 | 0 | 94 | 27 | 121 |
| Integrated Disease Management | 4 | 87 | 17 | 104 | 11 | 2 | 13 | 98 | 19 | 117 |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides | 6 | 282 | 159 | 449 | 32 | 15 | 47 | 314 | 174 | 488 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| Apiculture | 2 | 45 | 8 | 53 | 15 | 0 | 15 | 60 | 8 | 68 |
| 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** | **47** | **1099** | **636** | **1743** | **272** | **157** | **429** | **1371** | **793** | **2164** |

**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 |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Bee-keeping |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Sericulture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Value addition | 1 | 11 | | 27 | | 38 | | 1 | | 0 | | 1 | | 12 | | 27 | | 39 |
| Small scale processing | 1 | 12 | | 13 | | 25 | | 1 | | 3 | | 4 | | 13 | | 16 | | 29 |
| Post Harvest Technology | 4 | 75 | | 74 | | 149 | 9 | | 10 | | 19 | | 84 | | 84 | | 168 | |
| Tailoring and Stitching |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Rural Crafts | 3 | 19 | | 54 | | 73 | 6 | | 10 | | 16 | | 25 | | 64 | | 89 | |
| Production of quality animal products |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Dairying | 3 | 63 | | 74 | | 137 | | 0 | | 0 | 0 | | | 63 | 74 | | | 137 |
| 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** | 12 | 180 | | 242 | | 422 | 17 | | 23 | | 40 | | 197 | | 265 | | 462 | |

**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 |  |  | |  | |  |  |  |  |  |  |  |
| Small scale processing |  |  | |  | |  |  |  |  |  |  |  |
| Post Harvest Technology | 1 | 22 | | 21 | | 43 | 4 | 9 | 13 | 26 | 30 | 56 |
| Tailoring and Stitching |  |  | |  | |  |  |  |  |  |  |  |
| Rural Crafts | 3 | 0 | | 35 | | 35 | 0 | 25 | 25 | 0 | 60 | 60 |
| 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** | **4** | **22** | | **56** | | **78** | **4** | **34** | **38** | **26** | **90** | **116** |

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

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

7.G. Sponsored training programmes conducted

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** | **Crop production and management** |  |  |  |  |  |  |  |  |  |  |
| 1.a. | Increasing production and productivity of crops |  |  |  |  |  |  |  |  |  |  |
| 1.b. | Commercial production of vegetables |  |  |  |  |  |  |  |  |  |  |
| 1.c. | Integrated Pest and Disease Management | 7 | 181 | 44 | 225 | 11 | 2 | 13 | 191 | 46 | 237 |
| **2** | **Production and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Fruit Plants |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Ornamental plants |  |  |  |  |  |  |  |  |  |  |
| 2.c. | Spices crops |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Soil health and fertility management** |  |  |  |  |  |  |  |  |  |  |
| **4** | **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| **5** | **Methods of protective cultivation** |  |  |  |  |  |  |  |  |  |  |
| **6** | **Others (Banana cultivation)** |  |  |  |  |  |  |  |  |  |  |
| **7** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 7.a. | Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| 7.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **8** | **Farm machinery** |  |  |  |  |  |  |  |  |  |  |
| 8.a. | Farm machinery, tools and implements |  |  |  |  |  |  |  |  |  |  |
| 8.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **9.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| **10** | **Livestock production and management** |  |  |  |  |  |  |  |  |  |  |
| 10.a. | Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (Poultry) |  |  |  |  |  |  |  |  |  |  |
| 10.f. | Others (Livestock production and management) |  |  |  |  |  |  |  |  |  |  |
| **11.** | **Home Science** |  |  |  |  |  |  |  |  |  |  |
| 11.a. | Household nutritional security |  |  |  |  |  |  |  |  |  |  |
| 11.b. | Economic empowerment of women |  |  |  |  |  |  |  |  |  |  |
| 11.c. | Drudgery reduction of women |  |  |  |  |  |  |  |  |  |  |
| 11.d. | Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **12** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 12.a. | Capacity Building and Group Dynamics |  |  |  |  |  |  |  |  |  |  |
| 12.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | **Total** | 7 | 181 | 44 | 225 | 11 | 2 | 13 | 191 | 46 | 237 |

**Details of sponsoring agencies involved**

1. State Horticulture Mission

2. Dept. of Agriculture

3. ATMA

4. District Industries Centre (DIC), Idukki

5. Kudumbasree, Idukki

6. Coffee Board

7. NSS College, Rajakumary

8. GVHSS, Rajakumary

9. MBVHSS, Senapathy

10. NHRDF

11. MES College, Nedumkandam

12. DIC Idukki

13. VKV Foundation, Adimali

**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 (specify) |  |  |  |  |  |  |  |  |  |  |
| **2** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Value addition |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| 3.a. | Dairy farming | 2 | 28 | 40 | 68 | 0 | 0 | 0 | 28 | 40 | 68 |
| 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 | 30 | 0 | 198 | 198 | 0 | 242 | 242 | 0 | 440 | 440 |
| 4.e. | Seed production |  |  |  |  |  |  |  |  |  |  |
| 4.f. | Sericulture |  |  |  |  |  |  |  |  |  |  |
| 4.g. | Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| 4.h. | Nursery, grafting etc. |  |  |  |  |  |  |  |  |  |  |
| 4.i. | Tailoring, stitching, embroidery, dying etc. |  |  |  |  |  |  |  |  |  |  |
| 4.j. | Agril. para-workers, para-vet training |  |  |  |  |  |  |  |  |  |  |
| 4.k. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **5** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 5.a. | Capacity building and group dynamics |  |  |  |  |  |  |  |  |  |  |
| 5.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | **Grand Total** | **32** | **28** | **238** | **266** | **0** | **242** | **242** | **28** | **480** | **508** |

**PART VIII – EXTENSION ACTIVITIES**

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Nature of Extension Programme** | **No. of Programmes** | **No. of Participants (General)** | | | **No. of Participants**  **SC / ST** | | | **No. of extension personnel** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Field Day | 2 | 61 | 0 | 61 | 0 | 0 | 0 | 2 | 0 | 2 |
| Kisan Mela |  |  |  |  |  |  |  |  |  |  |
| Kisan Ghosthi |  |  |  |  |  |  |  |  |  |  |
| Exhibition | 4 | 45000 | 34000 | 79000 | 1600 | 1410 | 3010 | 25 | 20 | 45 |
| Film Show | 8 | 48 | 48 | 96 | 0 | 0 | 0 | 3 | 2 | 5 |
| Method Demonstrations | 2 | 100 | 29 | 129 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farmers Seminar |  |  |  |  |  |  |  |  |  |  |
| Workshop |  |  |  |  |  |  |  |  |  |  |
| Group meetings | 10 | 111 | 10 | 121 | 0 | 0 | 0 | 0 | 6 | 6 |
| Lectures delivered as resource persons |  |  |  |  |  |  |  |  |  |  |
| Newspaper coverage | 14 | - | - | - | - | - | - | - | - | - |
| Radio talks |  |  |  |  |  |  |  |  |  |  |
| TV talks | 4 |  |  |  |  |  |  |  |  |  |
| Popular articles |  |  |  |  |  |  |  |  |  |  |
| Extension Literature |  |  |  |  |  |  |  |  |  |  |
| Advisory Services | 356 | 355 | 57 | 412 | 0 | 0 | 0 | 2 | 4 | 6 |
| Scientific visit to farmers field | 18 | 23 | **0** | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farmers visit to KVK |  |  |  |  |  |  |  |  |  |  |
| Diagnostic visits | 6 | 8 | 0 | 8 | 0 | **0** | 0 | 2 | 0 | 2 |
| Exposure visits | 3 | 37 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ex-trainees Sammelan | 2 | 20 | 6 | 26 | 0 | 0 | 0 | 1 | 0 | 1 |
| Soil health Camp |  |  |  |  |  |  |  |  |  |  |
| Animal Health Camp | 2 | 50 | 41 | 91 | 0 | 0 | 0 | 5 | 0 | 5 |
| Agri mobile clinic |  |  |  |  |  |  |  |  |  |  |
| Soil test campaigns |  |  |  |  |  |  |  |  |  |  |
| Farm Science Club Conveners meet |  |  |  |  |  |  |  |  |  |  |
| Self Help Group Conveners meetings | 40 | 0 | 130 | 130 | 0 | 52 | 52 | 0 | 0 | 182 |
| Mahila Mandals Conveners meetings |  |  |  |  |  |  |  |  |  |  |
| Celebration of important days (World food day) | 1 | 9 | 0 | 9 | 0 | 0 | 0 | 28 | 30 | 58 |
| World Soil Day | 1 | 80 | 8 | 88 | 0 | 0 | 0 | 13 | 6 | 19 |
| National Milk Day | 1 | 30 | 6 | 36 | 0 | 0 | 0 | 0 | 0 | 0 |
| Any Other (Specify) |  |  |  |  |  |  |  |  |  |  |
| **Total** | **474** | **45932** | **34335** | **80267** | **1600** | **1462** | **3062** | **81** | **68** | **331** |

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

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

# 9.B. Production of planting materials by the KVKs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Hybrid** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial |  |  |  |  |  |  |
| Vegetable seedlings |  |  |  |  |  |  |
| Fruits | Mangosteen | High yielding local selection | - | 20 | 6000 | 6 |
| Ornamental plants |  |  |  |  |  |  |
| Medicinal and Aromatic |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |
| Spices | Nutmeg | High yielding local selection | - | 50 | 15000 | 12 |
| Tuber |  |  |  |  |  |  |
| Fodder crop saplings |  |  |  |  |  |  |
| Forest Species |  |  |  |  |  |  |
| Others(specify) |  |  |  |  |  |  |
| **Total** |  |  |  | **70** | **21,000.00** | **18** |

**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 | Metarhizium | 145 | 17400.00 | 61 |
|  | *Bacillus thruingensis* | 69 | 8280.00 | 20 |
|  | Beauveria | 448 | 53760.00 | 99 |
|  | Lecanicillium | 64 | 7680.00 | 36 |
|  | Yellow sticky trap | 5590 | 391300.00 | 380 |
|  | Blue sticky trap | 10 | 700.00 | 1 |
|  | Neem oil | 995 | 348250.00 | 420 |
| Bio-fungicide | Trichoderma | 1384 | 166080.00 | 215 |
| Bio Agents | Pseudomonas | 1074 | 128880.00 | 199 |
|  | *Bacillus subtillus* | 24 | 2880.00 | 9 |
| Others (specify) |  |  |  |  |
| **Total** |  | **9803** | **11,25,210.00** | **1,440** |

# 9.D. Production of livestock materials

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particulars of Live stock | **Name of the breed** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| **Dairy animals** |  |  |  |  |
| Cows |  |  |  |  |
| Buffaloes |  |  |  |  |
| Calves |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Poultry** |  |  |  |  |
| Broilers |  |  |  |  |
| Layers | BV 300 | 200 | 32000.00 | 89 |
| Duals (broiler and layer) |  |  |  |  |
| Japanese Quail |  |  |  |  |
| Turkey |  |  |  |  |
| Emu |  |  |  |  |
| Ducks |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Piggery** |  |  |  |  |
| Piglet |  |  |  |  |
| Others (Pl.specify) |  |  |  |  |
| **Fisheries** |  |  |  |  |
| Fingerlings |  |  |  |  |
| Others (Carp Fishes) | Carp | 535 Kg | 80250.00 | 2 |
| **Total** |  |  | **1,12,250.00** | **91** |

**PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND**

**DROUGHT MITIGATION**

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

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

(B) Literature developed/published

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Title** | **Authors name** | **Number** |
| Research papers |  |  |  |
| Technical reports |  |  |  |
| News letters | KVK Newsletter | All Staff | 5000 |
| Technical bulletins |  |  |  |
| Popular articles |  |  |  |
| Extension literature |  |  |  |
| Others (Pl. specify) |  |  |  |
| **TOTAL** |  |  |  |

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

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

**10.C. Success Stories / Case studies, if any**

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

**Details of success stories** :

***1.Background***

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

***2.Intervention process***

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

***3.Intervention Technology***

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

***4.Impact Horizontal Spread***

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

***5.Impact Economic Gains***

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

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

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

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

**Details of success stories** :

***1.Background***

Mrs. Lovely Babu, Kollarackal, Rajakumary panchayat in Idukki district. She was raised in a below middle class family. She always dreamt of reaching the sky, but all her talents and dreams were buried due to the responsibilities of her family since she was the elder child. She always had the desire to make varieties of artificial flowers and handicrafts. In her childhood days she used to collect dry leaves and flowers from the forest nearby and used to make different varieties of bouquet arrangements but no one realized her talents and abilities. Even after her marriage, she had been struggling for twenty years to bring up her children and to look after her in laws. But all these problems were silly as compared to her great dream. She always kept in touch with her interest and dreams. Six months ago fortunately, she got a chance to attend the vocational training conducted under KVK Rural craft discipline. She was inspired by the motivations she received from Mrs. Rachel Skaria, Programme Assistant of Rural craft discipline, KVK. Her support brought great changes in Mrs. Lovely’s hidden talents. Both of them combined their ideas and brought a change in their creations and marketing trends. They visited various forests, hills, valleys and farms in the neighbouring states of Kerala, Tamil Nadu and Karnataka to collect raw-materials like varieties of dried grasses, areca sheets, palm leaves, corn husk, different types of cereals etc. They met owners of farms and seek their permission to pick up agricultural wastes, they visited bread factories to collect discarded bread to make a different varieties of flowers. Now Mrs. Lovely is an example how a woman can effectively utilize their talents and leisure time for income generation. She has taken bulk orders from fancy stores, local markets and she has participated in flower shows and exhibitions, now she started online marketing. She has employed two ladies to work along with her. The main finishing work is done by her and the rest of the work is done by the women working with her. She purchases the raw materials in bulk at a cheaper rate and the work place is her-own house. Therefore, the profit she gains is comparatively higher.

***2.Intervention process***

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

***3.Intervention Technology***

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

***4.Impact Horizontal Spread***

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

***5.Impact Economic Gains***

She earns an average profit of Rs. 25000 / month

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

Motivated from the above mentioned Mrs. Lovely’s successful enterprise, 12 rural women formed a self help group named Arts Vigyan SHG under Rural Craft discipline KVK, they started designing, jewelry making and production of home care products on a commercial basis. In addition to this unit, they are planning to start a small fancy store with loan availing from nearby Co-operative bank for self-sufficiency and self employment. Also they generate employment opportunities for others.

**10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year:** 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 – Individual requests from farmers/farm women, Interactive questionnaire during field visits, requests from the State Department of Agriculture

- Rural Youth – Interaction with SHGs, Need analysis in Vocational Schools & Colleges

- Inservice personnel - Requests from the State Department of Agriculture and other line departments

**10.G. Field activities**

i. Number of villages adopted : 11

ii. No. of farm families selected : 216

iii. No. of survey/PRA conducted : One each

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

Status of establishment of Lab : Functioning.

1. Year of establishment : 2005-06

2. List of equipments purchased with amount :

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

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 | 2096 | 1281 | 43 | 104800.00 |
| Water Samples | 18 | 16 | 10 | 900.00 |
| Plant samples | 0 | 0 | 0 | 0.00 |
| Manure samples | 4 | 3 | 1 | 200.00 |
| Others (specify) | 300 | 300 | 3 | 90000.00 |
| Total | 2418 | 1600 | 57 | 1,95,900.00 |

Details of samples analyzed during the 2016-17:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
| Soil Samples | 246 | 234 | 42 | 12300 |
| Water Samples | 0 | 0 | 0 | 0 |
| Plant samples | 0 | 0 | 0 | 0 |
| Manure samples | 0 | 0 | 0 | 0 |
| Others (specify) | 0 | 0 | 0 | 0 |
| Total | 246 | 234 | 42 | 12,300.00 |

**10.I. Technology Week celebration during 2016-17 Yes/No, If Yes**

Period of observing Technology Week : From 16-11-2016 to 20-11-2016

Total number of farmers visited : 1325

Total number of agencies involved : 8

Number of demonstrations visited by the farmers within KVK campus : 8

**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)** |
| Ecodon for rodents & Wild boar bio control | 25 | 90 | 13500 | 24000 |
| IIHR BANANA SPECIAL | 35 | 65 | 5,000 | 7,500 |
| EPN | 200 | 50 | 4,500 | 22,500 |
| Bio-management of Banana Pseudostem weevil | 50 | 80 | 1,200/ha | 3,100 |

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

**11.B. Cases of large scale adoption:** Nil.

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

**PART XII - LINKAGES**

**12.A. Functional linkage with different organizations**

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

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the scheme** | **Role of KVK** | **Date/ Month of initiation** | **Funding agency** | **Amount (Rs.)** |
| Evaluation of horticultural nurseries | Horticultural nurseries funded by SHM during the period from 2003 till 2014 were evaluated based on the criteria envisaged | 12/01/2016 | State Horticulture Mission | 70,000.00 |
| Skill development programme for agro-service centre executives | Agro-service centre executives were given hands on experience for different enterprises | 10/03/2016 | Department of Agriculture | 1,97,000.00 |
| Strengthening of bio-production unit | Bio-products were produced in an economic mode and supplied to farmers | 23/03/2016 | Department of Agriculture | 3,58,000.00 |

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

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

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

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

**Coordination activities between KVK and ATMA during 2016-17**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Programme** | **Particulars** | **No. of programmes attended by KVK staff** | **No. of programmes Organized by KVK** | **Other remarks (if any)** |
| **01** | **Meetings** | Monthly Technology Advisory | 10 | 2 | **-** |
| **02** | **Research projects** |  |  |  |  |
| **03** | **Training programmes** | Organic Farming | 6 | 2 | **-** |
| **04** | **Demonstrations** |  |  |  |  |
| **05** | **Extension Programmes** |  |  |  |  |
|  | Kisan Mela | 1 | 4 | 1 | **-** |
|  | Technology Week | 1 | 5 | 1 | **-** |
|  | Exposure visit |  |  |  |  |
|  | 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 |  |  |  |  |
|  | Agri-preneurs development |  |  |  |  |

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

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

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

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

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

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

**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. | Metarhizium | 145 | 5800 | 11600 | - |
| 2. | *Bacillus thruingensis* | 69 | 2760 | 5520 | - |
| 3. | Beauveria | 448 | 17290 | 36470 | - |
| 4. | Lecanicillium | 64 | 2560 | 5220 | - |
| 5. | Yellow sticky trap | 5590 | 195650 | 195650 | - |
| 6. | Blue sticky trap | 10 | 350 | 350 | - |
| 7. | Neem oil | 995 | 199000 | 149250 | - |
| 8. | Trichoderma | 1384 | 55360 | 110720 | - |
| 9. | Pseudomonas | 1074 | 42960 | 85920 | - |
| 10. | *Bacillus subtillus* | 24 | 960 | 1920 | - |

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

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

**13.F. Database management**

|  |  |  |
| --- | --- | --- |
| **S. No** | **Database target** | **Database created** |
| 1. | Farmers database | Database for 2016-17. |

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Amount sanction (Rs.)** | **Expenditure (Rs.)** | **Details of infrastructure created / micro irrigation system etc.** | **Activities conducted** | | | | | **Quantity of water harvested in ‘000 litres** | **Area irrigated / utilization pattern** |
|  |  |  | **No. of Training programmes** | **No. of Demonstration s** | **No. of plant materials produced** | **Visit by farmers**  **(No.)** | **Visit by officials**  **(No.)** |  |  |
| **0** | **0** | **Rain Water Harvesting Pond** | **2** | **6** |  | **85** | **8** | **200000** |  |
|  |  |  |  |  |  |  |  |  |  |

**PART XIV - FINANCIAL PERFORMANCE**

**14.A. Details of KVK Bank accounts**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bank account** | **Name of the bank** | **Location** | **Branch code** | **Account Name** | **Account Number** | **MICR Number** | **IFSC Number** |
| Revolving Fund Account | State Bank of India | Rajakumary | 70453 | Bapooji Krishi Vigyan Kendra (Rev Fund) | 67155078042 | 6850002932 | SBIN0070453 |
| Main Grant Account | State Bank of India | Rajakumary | 70453 | Bapooji Sevak Samaj Krishi Vigyan Kendra | 57060836995 | 6850002932 | SBIN0070453 |

**14.B. Utilization of KVK funds during the year 2016-17 (Rs. in lakh)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 92.59 | 92.59 | 90.62332 |
| 2 | **Traveling allowances** | 1.50 | 1.50 | 1.50000 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 2.25 | 2.25 | 2.25000 |
| *B* | POL, repair of vehicles, tractor and equipments | 1.50 | 1.50 | 1.50000 |
| *C* | Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained) | 0.75 | 0.75 | 0.75000 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 0.30 | 0.30 | 0.30000 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 2.60 | 2.60 | 2.58900 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 0.51 | 0.51 | 0.50300 |
| *G* | Training of extension functionaries | 0.25 | 0.25 | 0.25000 |
| *H* | Maintenance of buildings | 0.00 | 0.00 | 0.0000 |
| *I* | Farmer’s Field School | 0.00 | 0.00 | 0.0000 |
| *J* | Integrated Farming System | 0.50 | 0.50 | 0.50000 |
| *K* | Extension Activities | 0.50 | 0.50 | 0.50000 |
| *L* | Library | 0.20 | 0.20 | 0.20000 |
| *M* | SWTL and issue of Soil Health Cards | 0.50 | 0.50 | 0.50000 |
| *N* | Display board | 0.39 | 0.39 | 0.39000 |
| **TOTAL (A)** | | **104.34** | **104.34** | **102.35532** |
| **B. Non-Recurring Contingencies** | |  |  |  |
| 1 | **Works** | 0.00 | 0.00 | 0.0000 |
| 2 | **Equipments including SWTL & Furniture** | 4.00 | 4.00 | 4.0000 |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 0.00 | 0.00 | 0.0000 |
| 4 | **Library** (Purchase of assets like books & journals) | 0.00 | 0.00 | 0.0000 |
| **TOTAL (B)** | | 4.00 | 4.00 | 4.0000 |
| **C. REVOLVING FUND** | | 0.00 | 0.00 | 0.0000 |
| **GRAND TOTAL (A+B+C)** | | **108.34** | **108.34** | **106.35532** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Opening balance as on 1st April** | **Income during the year** | **Expenditure during the year** | **Net balance in hand as on 1st April of each year** |
| April 2014 to March 2015 | 4.59576 | 18.60745 | 19.63000 | 3.57321 |
| April 2015 to March 2016 | 3.57321 | 10.66089 | 9.95650 | 4.27760 |
| April 2016 to March 2017 | 4.27760 | 17.35988 | 20.69216 | 0.94532 |

**15. Details of HRD activities attended by KVK staff during 2016-17**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the staff** | **Designation** | Title of the training programme | Institute where attended | Dates |
| Sudhakar Soundarajan | SMS, (Plant Protection) | Establishment of mother cultures of different bio-control agents and Mycorrhizha | National Institute of Plant Health Management, Hyderabad. | 21.04.2016 to 23.04.2016 |
| Mass production and quality control of bio-agents | National Bureau of Agriculturally Important Insects, Bangalore | 13.11.2016 to 15.11.2016 |
| Participatory Impact Monitoring and Assessment (PIMA) | ICAR-KVK,MYRADA | 21.02.2017 to 25.02.2017 |
| Front line Extension Programme for Realizing Higher productivity and profitability in Farming | TNAU, Coimbatore | 07.03.2017 to 08.03.2017 |
| Jayisy Joseph | Programme Assistant, (Home Science) | Workshop on capacity building of Home Scientists on food processing | TNAU, Agricultural College and Research Institute, Madurai | 14th to 16th March 2017 |

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

ICAR-KVK Idukki, hosted by Bapooji Sevak Samaj, was honoured by the visit of **Dr. Trilochan Mohapatra, (**Secretary, DARE & Director General, ICAR) and **Shri Chhabilendra** **Roul,** IAS, (Addl. Secretary, DARE & Secretary, ICAR), along with the presence of **Dr. Sreenath Dixit**, (Director, ATARI, Bengaluru), on the 15th April, 2016. The team visited all the units of KVK and the farm. They observed all the works undertaken by the KVK in the campus and gave suggestions for the holistic improvement of the premises of KVK and the farm. Steps need to be taken to resolve the labour scarcity problem faced by the KVK through involving SHGs in different units in a participatory mode. Later they had an interaction with all the staff of KVK and critically analysed the work of the staff for the improvement of the agrarian scenario of Idukki district

The Interaction with Farmers Meeting of ICAR- Krishi Vigyan Kendra was held on **17th April, 2016** at ICAR-KVK, Santhanpara. The meeting was presided over by **Smt. Deenamma Kuriakose**, Chairperson, Krishi Vigyan Kendra in the presence of **Dr. Trilochan Mohapatra, (**Secretary, DARE & Director General, ICAR), **Shri Chhabilendra** **Roul,** IAS, (Addl. Secretary, DARE & Secretary, ICAR), **Dr. J. K. Jena**, Deputy Director General (Fisheries) & **Dr. Sreenath Dixit**, (Director, ATARI, Bengaluru).

The meeting started with the ICAR Theme Song. **Dr. Binu John Sam**, Programme Coordinator i/c, briefed the purpose of the meeting and welcomed the guests of honour. **Dr. Sreenath Dixit**, Director, ATARI, Bengaluruin his openingremarks briefed the importance of this meeting to farmers and how to resolve their problems though KVK by scientist-farmer partnership mode.

**Dr. J.K. Jena**, Deputy Director General (Fisheries) in his address suggested that KVK, idukki have to utilize the experts in fisheries from ICAR institutes like CMFRI & CIFT, Ernakulam for promoting fisheries production and their value addition.

**Smt. Deenamma Kuriakose,** Chairperson, KVK in her presidential address, thanked all the Dignitaries from New Delhi & Bengalaru for attending the meeting and briefed the KVK activities and its impact in the agrarian scenario of Idukki district.

**Shri. Chhabilendra**, **Roul,** IAS, Addl. Secretary, DARE & Secretary, ICAR in his address reiterated that without farmer participation, there would not have been any use for such an interaction. He also pointed out that 109 ICAR Institutes are located throughout India. Out of this, 5 are in Kerala and 9 regional centres in Kerala. At present there are 643 KVKs functioning in India. Every technology/variety/solution has to be first tested in an experimental basis in field and transfer the technology to the farmer through KVKs. He specified the role of KVK as the link with farmers and their feedback has to be reported to ICAR system. He also pointed out that linkage with farmers in all aspects has to be strengthened further in future.

The meeting was officially inaugurated by lighting the traditional lamp by, **Dr. Trilochan Mohapatra,** Secretary, DARE & Director General, ICAR. In his inaugural address, he expressed his happiness to visit this KVK and was overwhelmed by the participation of farmers for the meeting. He also stressed the need for taking all the technologies to the doorsteps of farmers and appreciated the works done by team KVK, Idukki in such a remote and hilly area. He requested the farmers and officials of the line departments to visit this KVK often to ensure that the mandatory activities are carried out to the fullest for the benefit of farmers of Idukki district. He also urged the technical experts of this KVK to be fully equipped with the scientific advancements and always be a “Lit Lamp” among the farmers of this district. Out of the 643 KVKS in India, many KVKs are run by NGOs, SAUs and ICAR. He insisted to the KVK to plan and involve the farmers to utilize the infrastructure and other facilities of KVK to the maximum extent and to have partnership with all production organizations of this district. He suggested that all the modern technologies are scientific and very lucrative to the farming community. And he pointed out the main objective of this interface meeting is to understand the problem of farmers and find out meaningful solutions.

He briefed the different GOI Schemes which are channelized through KVKs for the benefit of the farmers. He categorically explained the following GoI initiatives for the benefit of farming community *viz:* Soil Health card for importance of soil health, Agri Insurance Scheme and support for Organic Farming. He urged the farmers to concentrate on IFS farming system models and promote their agricultural enterprises in an organic way for ensuring sustainable income. And finally he pointed out the Scheme and Slogan “Mera Gaav Mera Gurv” put forth by Mr. Radha Mohan Singh, the Honorable Minister for Agriculture.

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Brochures in Malayalam from the disciplines of Plant Protection, Animal Husbandry & Soil Science were released during the meeting by ICAR Officials. .

Around 243 farmers from different locations of idukki district actively participated in the interaction session that followed and the queries from the farmers were answered within the scope of the meeting

**Mr. Shaji Kakkatu** (Office Superintendent, KVK, Idukki) proposed the vote of thanks and the meeting came to a end at 5.30 pm.

**SUMMARY FOR 2016-17**

# I. TECHNOLOGY ASSESSMENT

**Summary of technologies assessed under various crops**

|  |  |  |  |
| --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technology assessed** | **No. of trials** |
| Integrated Nutrient Management |  |  |  |
|  |  |  |
| Varietal Evaluation | Black Pepper | Assessment of suitable black pepper foot rot (quick wilt) resistant variety for Idukki district | 5 |
| Salad Cucumber | Assessment of varieties of Salad cucumber  (*Brassica oleracea* var. italica) in poly house for high ranges | 5 |
| Cassava | Assessment of different varieties of tapioca for resistance of cassava mosaic virus disease in high ranges | 5 |
| Integrated Pest Management | Small cardamom | Assessment of different bio-pesticides and parasites against cardamom stem and capsule borer, *Conogethes punctiferalis* | 5 |
|  |  |  |
| Integrated Crop Management |  |  |  |
|  |  |  |
| Integrated Disease Management | Cowpea | Biological control of cowpea anthracnose disease, *Colletotrichum destructivum* | 5 |
|  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |
|  |  |  |
| Weed Management |  |  |  |
|  |  |  |
| Resource Conservation Technology |  |  |  |
|  |  |  |
| Farm Machineries |  |  |  |
|  |  |  |
| Integrated Farming System |  |  |  |
|  |  |  |
| Seed / Plant production |  |  |  |
|  |  |  |
| Value addition |  |  |  |
|  |  |  |
| Drudgery Reduction |  |  |  |
| Storage Technique |  |  |  |
|  |  |  |
| Mushroom |  |  |  |
|  |  |  |
| **Total** | | | **25** |

**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 | Assessment of different methods of prophylactic management of udder oedema disease in dairy animals | 5 |
| Evaluation of Breeds |  |  |  |
| Feed and Fodder management |  |  |  |
| Nutrition Management |  |  |  |
| Production and Management |  |  |  |
| Others (Pl. specify) |  |  |  |
| **Total** | | | **5** |

**Summary of technologies assessed under various enterprises:** Nil.

**Summary of technologies assessed under home science:** Nil.

# II. TECHNOLOGY REFINEMENT: Nil.

**III. FRONTLINE DEMONSTRATION**

**Crops**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop** | **Thematic area** | **Name of the technology demonstrated** | **No. of KVKs** | **No. of Farmer** | **Area**  **(ha)** | **Yield (q/ha)** | | **% change in yield** | **Other parameters** | | **\*Economics of demonstration (Rs./ha)** | | | | **\*Economics of check**  **(Rs./ha)** | | | |
| **Demons**  **ration** | **Check** |  | **Demonstration** | **Check** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** |
| Cereals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Millets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pulses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vegetables** | INM | Demonstration of Ayar in Banana | 1 | 10 | 0.025 | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | Open precision farming | Demonstration of open precision farming in bitter gourd | 1 | 2 | 0.6 | 1930 | 1774 | 8.8 | - | - | 164700 | 253840 | 89140 | 1.54 | 115000 | 150000 | 35000 | 1.30 |
|  | Crop Management | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | 1 | 5 | 5 units | - | - | - | 0.84 | Not practiced | 1690.66 | 3435.5 | 1744.84 | 2.03 | Not practiced | - | - | - |
| **Flowers** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ornamental** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fruit** | Open precision farming | Demonstration of low cost open precision farming in Strawberry *(Fragaria ananassa)* | 1 | 3 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Fibres like Cotton** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Spices and condiments** | IDM | Integrated Management for fusarium disease in small cardamom plantations | - | 10 | 2 | 110 | 81 | 54 | - | - | 285000 | 465000 | 180000 | 1.631 | 300000 | 394000 | 94000 | 1.31 |
|  | INM | Integrated Nutrient Management in Cardamom | 1 | 10 | 1.0 | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | Crop improvement | Column Method for production of quality planting materials in Black Pepper | 1 | 3 | 3 units | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | Crop improvement | Improved soil less method (Protray) for production of healthy planting material of ginger | 1 | 3 | 0.012 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Commercial crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Medicinal and aromatic** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fodder** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Plantation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fibre** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Others (pl.specify)** | Kitchen waste management | Low cost bio compost bin for kitchen waste management | 1 | 4 | 4 units | - | - | - | Kitchen waste management with bio compost bin | - | 4100 | 6400 | 2300 | 1.56 | - | - | - | - |
| **Others (pl.specify)** | Value addition | Product diversification in rose apple to reduce wastage and increase additional income | 1 | 6 | 6 units | - | - | - | Shellf life | - | 1070 | 1640 | 570 | 1.53 | 305 | 350 | 45 | 1.14 |
| **Others (Tuber Crops)** | Crop diversification | Demonstration of Acrid free variety Gajendra of Amorphophallus in high ranges | 1 | 10 | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Others (Tuber Crops)** | Crop diversification | Demonstration of potassium efficient variety of Tapioca -Sree Pavitra | 1 | 10 | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | **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

Livestock

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Thematic area** | **Name of the technology demonstrated** | **No. of KVKs** | **No. of Farmer** | **No.of units** | **Major parameters** | | **% change in major parameter** | **Other parameter** | | **\*Economics of demonstration (Rs.)** | | | | **\*Economics of check**  **(Rs.)** | | | |
| **Demons**  **ration** | **Check** |  | **Demons**  **ration** | **Check** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** |
| **Dairy** | Feed & Fodder | Demonstration of Fodder Cafetaria in rural households of Idukki district. | 1 | 10 | 10 | 15 | 14 | 7.14 | 0 | 0 | 13610 | 30420 | 16810 | 2.24 | 14600 | 23940 | 8230 | 1.63 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Poultry** | Scientific Disease management | Prophylactic management of Newcastle Disease in poultry using oral pellet vaccine | 1 | 10 | 10 | 20 | 18 | 11.11 | 0 | 0 | 400 | 788 | 388 | 1.99 | 219 | 357 | 138 | 1.63 |
| **Rabbitry** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Pigerry** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Sheep and goat** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Duckery** | Evaluation of breeds | Demonstration of Vigova super M duck in backyard system | 1 | 10 | 10 | 20 | 18 | 11.11 | 0 | 0 | 1899 | 5470 | 3571 | 2.85 | 1025 | 2594 | 1569 | 2.45 |
| **Others (pl.specify)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Total** | |  |  |  |  | | | | | | | | | | | | |

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

\*\* BCR= GROSS RETURN/GROSS COST

Fisheries: Nil.

Other enterprises: Nil.

Women empowerment : Nil.

Farm implements and machinery : Nil.

**Other enterprises:** Nil.

IV. Training Programme

**Training for Farmers and Farm Women including sponsored training programmes (On campus)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation | 2 | 31 | 14 | 45 | 2 | 2 | 4 | 33 | 16 | 49 |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 1 | 14 | 0 | 14 | 0 | 0 | 0 | 14 | 0 | 14 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Organic farming in vegetable) | 2 | 75 | 14 | 89 | 0 | 0 | 0 | 75 | 14 | 89 |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising | 2 | 65 | 20 | 85 | 5 | 5 | 10 | 70 | 25 | 95 |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (Specify) |  |  |  |  |  |  |  |  |  |  |
| Others (ICM in Vegetable crops) |  |  |  |  |  |  |  |  |  |  |
| **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 | 1 | 25 | 5 | 30 | 0 | 0 | 0 | 25 | 5 | 30 |
| Others (Post Harvest Management and Processing) | 1 | 15 | 21 | 36 | 0 | 0 | 0 | 15 | 21 | 36 |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management | 1 | 14 | 6 | 20 | 0 | 0 | 0 | 14 | 6 | 20 |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management |  |  |  |  |  |  |  |  |  |  |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 1 | 7 | 10 | 17 | 0 | 0 | 0 | 7 | 10 | 17 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening |  |  |  |  |  |  |  |  |  |  |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet |  |  |  |  |  |  |  |  |  |  |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Women empowerment |  |  |  |  |  |  |  |  |  |  |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts | 4 | 0 | 23 | 23 | 0 | 35 | 35 | 0 | 58 | 58 |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Processing and Packaging of Mushroom) |  |  |  |  |  |  |  |  |  |  |
| **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 |  |  |  |  |  |  |  |  |  |  |
| 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 | 2 | 93 | 0 | 93 | 9 | 2 | 11 | 102 | 2 | 104 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| 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** | **10** | **189** | **47** | **236** | **9** | **37** | **46** | **198** | **84** | **282** |

**Training for Farmers and Farm Women including sponsored training programmes (Off campus)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management (Spices) |  |  |  |  |  |  |  |  |  |  |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (Specify) |  |  |  |  |  |  |  |  |  |  |
| Others (ICM in vegetables) | 5 | 176 | 52 | 228 | 80 | 16 | 96 | 256 | 68 | 324 |
| Others (Organic farming-Vegetables) | 11 | 335 | 176 | 511 | 133 | 44 | 177 | 468 | 220 | 688 |
| **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) |  |  |  |  |  |  |  |  |  |  |
| Others (Crop diversification) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management |  |  |  |  |  |  |  |  |  |  |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Soil Conservation) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management | 3 | 52 | 30 | 82 | 0 | 0 | 0 | 52 | 30 | 82 |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening |  |  |  |  |  |  |  |  |  |  |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet |  |  |  |  |  |  |  |  |  |  |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking (Workshop) | 1 | 2 | 6 | 8 | 1 | 16 | 17 | 3 | 22 | 25 |
| Gender mainstreaming through SHGs | 1 | 4 | 8 | 12 | 0 | 0 | 0 | 4 | 8 | 12 |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition | 3 | 4 | 67 | 71 | 0 | 4 | 4 | 4 | 71 | 75 |
| Women empowerment | 2 | 9 | 18 | 27 | 0 | 8 | 8 | 9 | 26 | 35 |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts | 5 | 0 | 44 | 44 | 0 | 52 | 52 | 0 | 96 | 96 |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (Industry training on food processing) | 1 | 9 | 24 | 33 | 0 | 0 | 0 | 9 | 24 | 33 |
| 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 | 3 | 94 | 27 | 121 | - | - | - | 94 | 27 | 121 |
| Integrated Disease Management | 4 | 87 | 17 | 104 | 11 | 2 | 13 | 98 | 19 | 117 |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides | 6 | 282 | 159 | 449 | 32 | 15 | 47 | 314 | 174 | 488 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| Apiculture | 2 | 45 | 8 | 53 | 15 | 0 | 15 | 60 | 8 | 68 |
| 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** | **47** | **1099** | **636** | **1743** | **272** | **157** | **429** | **1371** | **793** | **2164** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | | | | | | | |
| **General** | | | | | | **SC/ST** | | | | | | **Grand Total** | | | | |
| **Male** | **Female** | | **Total** | | | **Male** | | **Female** | | **Total** | | **Male** | | **Female** | | **Total** |
| Nursery Management of Horticulture crops |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Training and pruning of orchards |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Protected cultivation of vegetable crops |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Commercial fruit production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Integrated farming |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Seed production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Production of organic inputs |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Planting material production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Vermi-culture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Mushroom Production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Bee-keeping |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Sericulture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Value addition | 1 | 11 | | 27 | | 38 | | 1 | | 0 | | 1 | | 12 | | 27 | | 39 |
| Small scale processing | 1 | 12 | | 13 | | 25 | | 1 | | 3 | | 4 | | 13 | | 16 | | 29 |
| Post Harvest Technology | 4 | 75 | | 74 | | 149 | 9 | | 10 | | 19 | | 84 | | 84 | | 168 | |
| Tailoring and Stitching |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Rural Crafts | 3 | 19 | | 54 | | 73 | 6 | | 10 | | 16 | | 25 | | 64 | | 89 | |
| Production of quality animal products |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Dairying | 3 | 63 | | 74 | | 137 | | 0 | | 0 | 0 | | | 63 | 74 | | | 137 |
| Sheep and goat rearing |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Quail farming |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Piggery |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Rabbit farming |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Poultry production |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Ornamental fisheries |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Composite fish culture |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Freshwater prawn culture |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Shrimp farming |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Pearl culture |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Cold water fisheries |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Fish harvest and processing technology |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Fry and fingerling rearing |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Any other (pl.specify) |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Any other (ICM Vegetables) |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| **TOTAL** | 12 | 180 | | 242 | | 422 | 17 | | 23 | | 40 | | 197 | | 265 | | 462 | |

**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 |  |  | |  | |  |  |  |  |  |  |  |
| Small scale processing |  |  | |  | |  |  |  |  |  |  |  |
| Post Harvest Technology | 1 | 22 | | 21 | | 43 | 4 | 9 | 13 | 26 | 30 | 56 |
| Tailoring and Stitching |  |  | |  | |  |  |  |  |  |  |  |
| Rural Crafts | 3 | 0 | | 35 | | 35 | 0 | 25 | 25 | 0 | 60 | 60 |
| Production of quality animal products |  |  | |  | |  |  |  |  |  |  |  |
| Dairying |  |  | |  | |  |  |  |  |  |  |  |
| Sheep and goat rearing |  |  | |  | |  |  |  |  |  |  |  |
| Quail farming |  |  | |  | |  |  |  |  |  |  |  |
| Piggery |  |  | |  | |  |  |  |  |  |  |  |
| Rabbit farming |  |  | |  | |  |  |  |  |  |  |  |
| Poultry production |  |  | |  | |  |  |  |  |  |  |  |
| Ornamental fisheries |  |  | |  | |  |  |  |  |  |  |  |
| Composite fish culture |  |  | |  | |  |  |  |  |  |  |  |
| Freshwater prawn culture |  |  | |  | |  |  |  |  |  |  |  |
| Shrimp farming |  |  | |  | |  |  |  |  |  |  |  |
| Pearl culture |  |  | |  | |  |  |  |  |  |  |  |
| Cold water fisheries |  |  | |  | |  |  |  |  |  |  |  |
| Fish harvest and processing technology |  |  | |  | |  |  |  |  |  |  |  |
| Fry and fingerling rearing |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  | |  | |  |  |  |  |  |  |  |
| Any other (ICM Vegetables) |  |  | |  | |  |  |  |  |  |  |  |
| Any other (Organic farming) |  |  | |  | |  |  |  |  |  |  |  |
| **TOTAL** | 4 | 22 | | 56 | | 78 | 4 | 34 | 38 | 26 | 90 | 116 |

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

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

**Sponsored training programmes**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** | **Crop production and management** |  |  |  |  |  |  |  |  |  |  |
| 1.a. | Increasing production and productivity of crops |  |  |  |  |  |  |  |  |  |  |
| 1.b. | Commercial production of vegetables |  |  |  |  |  |  |  |  |  |  |
| 1.c. | Integrated Pest and Disease Management | 7 | 181 | 44 | 225 | 11 | 2 | 13 | 191 | 46 | 237 |
| **2** | **Production and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Fruit Plants |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Ornamental plants |  |  |  |  |  |  |  |  |  |  |
| 2.c. | Spices crops |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Soil health and fertility management** |  |  |  |  |  |  |  |  |  |  |
| **4** | **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| **5** | **Methods of protective cultivation** |  |  |  |  |  |  |  |  |  |  |
| **6** | **Others (Banana cultivation)** |  |  |  |  |  |  |  |  |  |  |
| **7** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 7.a. | Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| 7.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **8** | **Farm machinery** |  |  |  |  |  |  |  |  |  |  |
| 8.a. | Farm machinery, tools and implements |  |  |  |  |  |  |  |  |  |  |
| 8.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **9.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| **10** | **Livestock production and management** |  |  |  |  |  |  |  |  |  |  |
| 10.a. | Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| 10.f. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **11.** | **Home Science** |  |  |  |  |  |  |  |  |  |  |
| 11.a. | Household nutritional security |  |  |  |  |  |  |  |  |  |  |
| 11.b. | Economic empowerment of women |  |  |  |  |  |  |  |  |  |  |
| 11.c. | Drudgery reduction of women |  |  |  |  |  |  |  |  |  |  |
| 11.d. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **12** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 12.a. | Capacity Building and Group Dynamics |  |  |  |  |  |  |  |  |  |  |
| 12.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | **Total** | 7 | 181 | 44 | 225 | 11 | 2 | 13 | 191 | 46 | 237 |

**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 (specify) |  |  |  |  |  |  |  |  |  |  |
| **2** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Value addition |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| 3.a. | Dairy farming | 2 | 28 | 40 | 68 | 0 | 0 | 0 | 28 | 40 | 68 |
| 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 | 30 | 0 | 198 | 198 | 0 | 242 | 242 | 0 | 440 | 440 |
| 4.e. | Seed production |  |  |  |  |  |  |  |  |  |  |
| 4.f. | Sericulture |  |  |  |  |  |  |  |  |  |  |
| 4.g. | Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| 4.h. | Nursery, grafting etc. |  |  |  |  |  |  |  |  |  |  |
| 4.i. | Tailoring, stitching, embroidery, dying etc. |  |  |  |  |  |  |  |  |  |  |
| 4.j. | Agril. para-workers, para-vet training |  |  |  |  |  |  |  |  |  |  |
| **5** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 5.a. | Capacity building and group dynamics |  |  |  |  |  |  |  |  |  |  |
|  | **Grand Total** | **32** | **28** | **238** | **266** | **0** | **242** | **242** | **28** | **480** | **508** |

V. Extension Programmes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activities** | **No. of programmes** | **No. of farmers** | **No. of Extension Personnel** | **TOTAL** |
| Advisory Services | 356 | 412 | 23 | 435 |
| Diagnostic visits | 6 | 8 | 5 | 13 |
| Field Day | 2 | 61 | 2 | 63 |
| Group discussions | 10 | 121 | 6 | 127 |
| Kisan Ghosthi |  |  |  |  |
| Film Show | 8 | 96 | 5 | 101 |
| Self -help groups | 2 | 28 | 0 | 28 |
| Kisan Mela |  |  |  |  |
| Exhibition | 4 | 79000 | 45 | 79045 |
| Scientists' visit to farmers field | 18 | 23 | 0 | 23 |
| Plant/animal health camps | 2 | 91 | 5 | 96 |
| Farm Science Club |  |  |  |  |
| Ex-trainees Sammelan | 2 | 26 | 1 | 27 |
| Farmers' seminar/workshop |  |  |  |  |
| Method Demonstrations | 2 | 129 | 0 | 129 |
| Celebration of important days (World food day) | 1 | 9 | 58 | 67 |
| Celebration of important days (World soil day) | 1 | 88 | 19 | 107 |
| Celebration of important days (National milk day) |  |  |  |  |
| Exposure visits | 1 | 36 | 0 | 36 |
| Others (Newspaper coverage) | 3 | 37 | 0 | 37 |
| Others (TV Talk) | 14 |  |  |  |
| Others (pl. specify) | 4 |  |  |  |
| **Total** | **436** | **80165** | **169** | **80334** |

Details of other extension programmes

|  |  |
| --- | --- |
| **Particulars** | **Number** |
| Electronic Media | 0 |
| Extension Literature | 3 |
| News Letter | 1 |
| News paper coverage | 15 |
| Technical Articles | 0 |
| Technical Bulletins | 2 |
| Technical Reports | 0 |
| Radio Talks | 3 |
| TV Talks | 5 |
| Animal health camps | 0 |
| Others (pl. specify) | 0 |
| **Total** | **29** |

1. **PRODUCTION OF SEED/PLANTING MATERIAL**

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

# Production of planting materials by the KVKs: Nil.

**Production of Bio-Products**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bio Products** | **Name of the bio-product** | **Quantity** | **Value (Rs.)** | **No. of Farmers** |
| **Kg** |
| Bio Fertilizers |  |  |  |  |
|  |  |  |  |  |
| Bio-pesticide | Metarhizium | 145 | 17400.00 | 61 |
|  | *Bacillus thruingensis* | 69 | 8280.00 | 20 |
|  | Beauveria | 448 | 53760.00 | 99 |
|  | Lecanicillium | 64 | 7680.00 | 36 |
|  | Yellow sticky trap | 5590 | 391300.00 | 380 |
|  | Blue sticky trap | 10 | 700.00 | 1 |
|  | Neem oil | 995 | 348250.00 | 420 |
| Bio-fungicide | Trichoderma | 1384 | 166080.00 | 215 |
| Bio Agents | Pseudomonas | 1074 | 128880.00 | 199 |
|  | *Bacillus subtillus* | 24 | 2880.00 | 9 |
| Others (specify) |  |  |  |  |
| **Total** |  | **9803** | **11,25,210.00** | **1,440** |

# 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 | BV 300 | 200 | 32000.00 | 89 |
| Duals (broiler and layer) |  |  |  |  |
| Japanese Quail |  |  |  |  |
| Turkey |  |  |  |  |
| Emu |  |  |  |  |
| Ducks |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Piggery** |  |  |  |  |
| Piglet |  |  |  |  |
| Others (Pl.specify) |  |  |  |  |
| **Fisheries** |  |  |  |  |
| Fingerlings |  |  |  |  |
| Others (Carp Fishes) | Carp | 535 Kg | 80250.00 | 2 |
| **Total** | | | **40, 250.00** | **89** |

**VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2016-17**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Samples | **No. of Samples** | **No. of Farmers** | **No. of Villages** | **Amount realized (Rs.)** |
| Soil | 246 | 234 | 42 | 12300 |
| Water | 0 | 0 | 0 | 0 |
| Plant | 0 | 0 | 0 | 0 |
| Manure | 0 | 0 | 0 | 0 |
| Others (Specify) | 0 | 0 | 0 | 0 |
| **Total** | 246 | 234 | 42 | 12,300.00 |

VIII. SCIENTIFIC ADVISORY COMMITTEE

|  |
| --- |
| **Number of SACs conducted:** 1 |
| Date : 30-01-2017 |
| Venue: Seminar Hall, ICAR-KVK (BSS), Idukki. |
| No.of Members Attended: 22 |

**IX. NEWSLETTER**

|  |
| --- |
| **Number of issues of newsletter published:** 1 |
| Special Edition, June 2016. |
| No. of copies: 5000 |

**X. RESEARCH PAPER PUBLISHED**

|  |
| --- |
| **Number of research paper published** |
| Nil |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activities conducted** | | | | |
| **No. of Training programmes** | **No. of Demonstration s** | **No. of plant materials produced** | **Visit by farmers**  **(No.)** | **Visit by officials**  **(No.)** |
| 2 | 6 | - | 85 | 8 |
|  |  |  |  |  |
|  |  |  |  |  |

-------------XXXXXXX-------------