**ANNUAL REPORT 2015-16**

**(FOR THE PERIOD APRIL 2015 TO MARCH 2016)**

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. | Nil | +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. Benjamin Mathew | Subject Matter Specialist | M | Agri. Extension | Ph.D. Horticulture | 15600-39100 | 21000 | 17-01-2011 | Permanent | Others |
| 5 | SMS | Dr. Binu John Sam | Subject Matter Specialist | M | Horticulture | Ph.D. Horticulture | 15600-39100 | 21000 | 17-01-2011 | Permanent | Others |
| 6 | SMS | Sudhakar Soundarajan | Subject Matter Specialist | M | Plant Protection | M.Sc. Agricultural Entomology, MBA | 15600-39100 | 21000 | 27-01-2011 | Permanent | OBC |
| 7 | SMS | Vacant | Subject Matter Specialist | **-** | Agronomy | **-** | **-** | **-** | **-** | **-** | **-** |
| 8 | Programme Assistant (Lab Tech.)  / T-4 | Jayisy Joseph | Programme Assistant | F | Home Science | M. Sc. Home Science (Extension for Rural Development) | 9300-34800 | 13500 | 20-06-1995 | Permanent | Others |
| 9 | Programme Assistant (Computer)  / T-4 | Biju Narayanan | Programme Assistant | M | Computer Application | M.C.A., PGDCA | 9300-34800 | 13500 | 01-10-2007 | Permanent | OBC |
| 10 | Programme Assistant/ Farm Manager | Rachel Skariakutty | Programme Assistant | F | Rural Craft | M.A. Sociology (P.G. Diploma in Rural Development) | 9300-34800 | 13500 | 05-06-1995 | Permanent | Others |
| 11 | Assistant | Shaji. K. Kakkattu | Assistant | M | **-** | **-** | 9300-34800 | 13500 | 05-06-1995 | Permanent | Others |
| 12 | Jr. Stenographer | Daisy Daniel | Jr. Stenographer | F | **-** | **-** | 5200-20200 | 7100 | 05-06-1995 | Permanent | Others |
| 13 | Driver | P. Nandagopal | Driver | M | **-** | **-** | 5200-20200 | 7200 | 05-06-1995 | Permanent | OBC |
| 14 | Auxiliary Staff | K.T. Mathew | Peon/ Messenger | M | **-** | **-** | 5200-20200 | 7000 | 05-06-1995 | Permanent | Others |
| 15 | Supporting Staff-1 | K.O. Jose | Skilled Supporting Staff-1 | M | **-** | **-** | 5200-20200 | 7000 | 05-06-1995 | Permanent | Others |
| 16 | Supporting Staff-2 | P. Sabu | Skilled Supporting Staff-2 | M | **-** | **-** | 5200-20200 | 7000 | 05-06-1995 | Permanent | Others |

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

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

**1.7. Infrastructural Development:**

**A) Buildings**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Name of building** | **Source of**  **funding** | **Stage** | | | | | |
| **Complete** | | | **Incomplete** | | |
| **Completion**  **Date** | **Plinth area (Sq. m.)** | **Expenditure (Rs.)** | **Starting Date** | **Plinth area**  **(Sq.m)** | **Status of construction** |
| 1. | Administrative  Building | ICAR | 2002 | 740 | 47,85,208.10 | - | - | - |
| 2. | Farmers’ Hostel | NA | - | - | - | - | - | *Master Plan & Estimate submitted. Sanction pending*. |
| 3. | Staff Quarters | NA | - | - | - | - | - | - |
| 4. | Demonstration Units |  |  |  |  |  |  |  |
|  | 1. Duck cum fish culture unit. | RF | 2009 | 50 | 7,000.00 | - | - | - |
|  | 2. Mushroom unit | Grama 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 | 75040 | Good condition. |
| Honda Aviator | March - 2009 | 50,000.00 | 11716 | Running condition, needs servicing |
| Motor Bike (Suzuki Shogun) | January - 1995 | 37,972.78 | 8864 | Not in use. |

**C) Equipments & AV aids**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the equipment** | **Year of purchase** | **Cost (Rs.)** | **Present status** |
| **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 2015-16**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Date** | **Number of Participants** | **No. of absentees** | **Salient Recommendations** | **Action taken** |
| 1. | 18/01/2016 | 17 | 7 | * Soil fertility management through awareness programme. * PoP for organic agriculture to be prepared. * To establish agro-meteorological service centre at KVK. * OFT should be first tested at KVK campus for validation. * Soil health cards should be prepared and distributed. * A compendium on OFT & FLD over the years need to be prepared. | * 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 2015 | 178.6 | 29.0 | 17.9 | 97.1 |
| May 2015 | 24.9 | 28.3 | 19.2 | 96.9 |
| June 2015 | 203.3 | 25.0 | 18.1 | 98.9 |
| July 2015 | 182.2 | 24.7 | 17.8 | 99.0 |
| August 2015 | 290.0 | 23.6 | 17.4 | 99.4 |
| September 2015 | 148.40 | 25.4 | 17.7 | 98.2 |
| October 2015 | 327.9 | 26.1 | 17.7 | 97.3 |
| November 2015 | 150.8 | 26.6 | 16.6 | 94.8 |
| December 2015 | 12.7 | 24.5 | 16.3 | 94.8 |
| January 2016 | 5.6 | 23.6 | 13.8 | 95.3 |
| February 2016 | 4.10 | 26.6 | 15.3 | 93.7 |
| March 2016 | 11.2 | 27.6 | 16.5 | 85.6 |

**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* | 160081 | 434638 ton (Milk) & 12090.87 MT (meat) | **-** |
| *Indigenous* |  | 1309 ton (milk) | **-** |
| **Buffalo** | 7627 | 4181 ton (milk) & 8385.62 MT (meat) | **-** |
| **Sheep** | | | |
| Crossbred | 35 |  | **-** |
| *Indigenous* |  |  |  |
| **Goats** | 127974 | 8898 ton (Milk) & 1092.10 MT (meat) | **-** |
| **Pigs** |  |  |  |
| *Crossbred* | 13631 | 5136.5 MT (Meat) | **-** |
| *Indigenous* |  |  |  |
| **Rabbits** | 29628 | **-** | **-** |
| **Poultry** | | | |
| Hens | 631501 | 7.64 crores (Egg) | **-** |
| *Desi* |  | 238 crores (Egg) | **-** |
| *Improved* |  | 6.25 crores (Egg) & 11019.8 MT (Meat) | **-** |
| Ducks |  | 1.10 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 2015-16 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 | Devikulam | Adimali | Adimali | 2 Years | Black Pepper, Cardamom, Banana, Vegetables | Pest outbreak | Integrated Pest Management |
| 2 | Udumbanchola | Chinnakanal | Chinnakanal | 2 Years | Cardamom | Indiscriminate use of chemical fertilizers | Integrated Nutrient Management |
| 3 | Udumbanchola | Santhanpara | Santhanpara | 5 Years | Cardamom, Black Pepper, Banana | Indiscriminate use of PP Chemicals | Integrated Pest Management |
| 4 | Udumbanchola | Rajakkad | Rajakkad | 5 Years | Cardamom, Black Pepper, Banana, Vegetables. | Indiscriminate use of chemical inputs | Integrated Crop Management |
| 5 | Udumbanchola | Nedumkandam | Nedumkandam | 2 Years | Cardamom, Black Pepper, Banana | Indiscriminate use of chemical inputs | Integrated Crop Management |
| 6 | Udumbanchola | Santhanpara | Santhanpara | 5 Years | Cardamom, Black Pepper, Banana, Vegetables. | Indiscriminate use of chemical inputs | Integrated Crop Management |
| 7 | Udumbanchola | Senapathy | Senapathy | 3 Years | Cardamom, Black Pepper, Banana, Vegetables, Mushroom. | Indiscriminate use of chemical inputs | Integrated Crop 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 |
| 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 | 34 | 34 | 12 | 12 | 108 | 108 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training** | | | | **Extension Programmes** | | | |
| **3** | | | | **4** | | | |
| **Number of Courses** | | **Number of Participants** | | **Number of Programmes** | | **Number of participants** | |
| **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** |
| 150 | 131 | 3750 | 5572 | 510 | 619 | 2250 | 2120 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed Production (Qtl.)** | | **Planting materials (Nos.)** | |
| **5** | | **6** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
|  |  | 15000 | 27268 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Livestock, poultry strains and fingerlings (No.)** | | **Bio-products** | |
| **7** | | **8** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
|  |  | Trichoderma-1000 L | 1110 L |
|  |  | Pseudomonas-2100 L | 2753 L |
|  |  | Metarhizium-200 L | 232 L |
|  |  | Pheromone trap-1200 Nos. | 1478 Nos. |
|  |  | Beauveria-450 L | 466 L |
|  |  | Liquid soap-30 L | 30 L |
|  |  | Detergent powder-5 kg | 4.5 kg |
|  |  | Bath soap-2 kg | 3 kg |

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

| **S. No** | **Thrust area** | **Crop/**  **Enterprise** | **Identified Problem** | **Interventions** | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Title of OFT if any** | **Title of FLD if any** | **Number of Training (farmers)** | **Number of Training (Youths)** | **Number of Training (extension personnel)** | **Extension activities**  **(No.)** | **Supply of seeds (Qtl.)** | **Supply of planting materials (No.)** | **Supply of livestock (No.)** | **Supply of bio products** | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **No.** | **Kg** |
| 1 | Crop improvement | Tapioca | Soil acidity leads to Zn and mg Deficiency resulting in low yield | Management practices for secondary and micronutrient disorders in tapioca | - | 0 | 0 | 0 | FAS-10  FV- 3 | - | - | - | - | - |
| 2 | Crop improvement | Carrot | Non-availabilty of high yielding varieties. | Assessment of suitable carrot varieties for Idukki district | - | 0 | 0 | 0 | FAS-5  Field visit-3 | - | - | - | - |  |
| 3 | Crop improvement | cardamom | Unscientific nutrient management | - | INM in cardamom | 5 | 0 | 0 | FAS-5  FV- 2  DV-5  Method demo-2 | - | - | - | - | - |
| 4 | Varietal evaluation | Broccoli | - | Assessment of suitable varieties of broccoli for high ranges | - | 3 | 2 | 0 | 5 | - | 1500 | - | Pseudomonas  Trichoderma | - |
| 5 | ICM | Black pepper | Existing varieties are highly susceptible to quick wilt | Assessment of suitable black pepper foot rot (quick wilt) resistant variety for Idukki district | - | 5 | 1 | 3 | 1 | - | - | - | Azospirillum  Phospho bacteria  VAM  Trichoderma  Pseudomonas | 12.5 kg  12.5 kg  25 kg  50L  50L |
| 6 | IPM | Cardamom | Snails and slugs damaged capsules leading to considerable economic loss | Management of snails & slugs in cardamom plantation | - | 4 | 2 | 1 | 2 | - | - | - | Vinegar    Coffee powder    Yeast    Honey | 10 litre  5 kg  5 kg  5 kg |
| 7 | IPM | Cardamom | Heavy infestation of root grub leading to heavy usage of PPC | - | Management of cardamom root grub with (EPN) | 5 | 3 | 1 | 1 | - | - | - | EPN | 24000 cadavers |
| 8 | IPDM | Bitter gourd | Indiscriminate use of pesticides leads to pesticide residual effect | - | Integrated Pest and Disease Management (IPDM) in Bitter gourd | 2 | 1 | 1 | 1 | - | - | - | Trichoderma  IIHR-Neem soap  Cuelure trap | 50 L  15L  56 nos. |
| 9 | Integrated Crop Management | Cowpea | - | - | Demonstration of IIHR vegetable special in cowpea var. Arka Mangala | 4 | 5 | 0 | 10 | 0.02 | - | - | Neem oil, Pseudomonas | - |
| 10 | Integrated Crop Management | Black pepper | - | - | Demonstration of IISR Nutrient mix in Black Pepper | 3 | 2 | 0 | 9 | - | - | - | - | - |
| 11 | Self-employment and Income generation of rural youth & women. | Nursery Management | - | - | Demonstration of Arka Microbial consortium enriched cocopeat for portray vegetable nursery | 2 | 5 | 1 | 0 | - | - | - | - | - |
| 12 | Crop Production | Mushroom | Large demand & inadequate supply | Preparation of cropping calendar with two types of mushrooms for year round production in Idukki district | - | 2 | 1 | 1 | 5 |  | 200 | - | - | - |
| 13 | Crop Production | Banana | Lodging of banana plants nearing maturity | Assessment of different props and support for mitigating wind damage in banana (Nendran) | - | 1 | 0 | 0 | - | - | - | - | - | - |
| 14 | Integrated Pest Management | Black Pepper | Dearth of quality planting materials | - | Column Method for production of quality planting materials in Black Pepper | 2 | 1 | 0 | 5 | - | 15 | - | - | - |
| 15 | Integrated Pest Management | Vegetables | Wastage of spent mushroom  beds | - | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | 2 | 2 | 0 | 6 | 0.03 | - | - | - | - |
| 16 | Year round production of vegetables | Vegetables | Non availability of year round quality vegetables | - | Popularisation of organic kitchen garden in homesteads for nutritional security | 4 | 0 | 0 | 36 | 30 packet/ demo | - | - | - | - |
| 17 | Fodder production | Mixed fodder | Shortage of fodder | - | Popularization of fodder cafeteria in rural households of Idukki district | 4 | 0 | 0 | Field visit-2 | Sorghum-7kg  Hedge Lucerne-2kg  Agathi-3kg  Maize-25kg  Stylo-1kg | - | - | - | - |
| 18 | Disease management | Jersey and HF | Ecto-endo parasitic infestation | - | Demonstration of Inj. Ivermectin for control of ecto-endo parasitic infestation in dairy cattle | 2 | 0 | 0 | Field visit-3 | - | - | - | - | - |
| 19 | Disease management | Hybrid &indigenous | Occurrence of Ranikhet disease | - | Prophylactic management of New castle disease in poultry using oral pellet vaccine | 2 | 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 | Management practices for secondary and micronutrient disorders in tapioca | KAU & TNAU | Tapioca | 5 | 0 | 1 | FAS- 5  Field visits - 3 |
| 2 | Assessment of suitable carrot varieties for Idukki district | IARI | Carrot | 5 | 0 | 1 | FAS-5  Field visits-3 |
| 3 | INM in cardamom | ICRI | Cardamom | 0 | 10 | 1 | FAS-5  Field visits - 2  Diagnostic Visits-5  Method demo-2 |
| 4 | Assessment of suitable varieties of broccoli for high ranges | IARI | Broccoli | 5 | 0 | 5 | FAS-5  Field visits -10  Diagnostic Visits -3 |
| 5 | Assessment of suitable black pepper foot rot (quick wilt) resistant variety for Idukki district | IISR & farmers developed variety | Black pepper | 1 | 0 | 5 | Field visits – 10  Demonstrations – 3 |
| 6 | Management of snails & slugs in cardamom plantation | ITK &ATMA | Cardamom | 1 | 0 | 4 | Field visits – 12  Demonstrations – 4 |
| 7 | Management of cardamom root grub with (EPN) | ICRI | Cardamom | 0 | 1 | 5 | Field visits – 10  Demonstrations – 10 |
| 8 | Integrated Pest and Disease Management (IPDM) in Bitter gourd | IIHR | Bitter gourd | 0 | 1 | 2 | Field visits – 16  Demonstrations – 10 |
| 9 | Demonstration of IIHR vegetable special in cowpea var. Arka Mangala | IIHR | Cowpea | 0 | 10 | 9 | FAS-15  Field visits -8  Diagnostic Visits -3 |
| 10 | Demonstration of IISR Nutrient mix in Black Pepper | IISR | Black Pepper | 0 | 10 | 5 | FAS-5  Field visits -5 |
| 11 | Demonstration of Arka Microbial consortium enriched cocopeat for portray vegetable nursery | IIHR | Nursery Management | 0 | 5 | 7 | FAS-8  Field visits -3 |
| 12 | Preparation of cropping calendar with two types of mushrooms for year round production in Idukki district | KAU | Mushroom | 4 | 0 | 2 | FAS- 8  Field visits – 2 |
| 13 | Assessment of different props and support for mitigating wind damage in banana (Nendran) | KAU | Banana | 5 | 0 | 0 | FAS- 5  Field visits – 2 |
| 14 | Column Method for production of quality planting materials in Black Pepper | IISR | Black Pepper | 0 | 3 | 3 | FAS- 5  Field visits - 3 |
| 15 | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | KAU &TNAU | Mushroom, Vegetables | 0 | 5 | 4 | FAS- 8  Field visits - 3 |
| 16 | Popularisation of organic kitchen garden in homesteads for nutritional security | KAU | Vegetables | 0 | 1 | 4 | Field visits – 6  FAS – 30 |
| 17 | Popularization of fodder cafeteria in rural households of Idukki district | KAU | Cross bred | 0 | 1 | 4 | - |
| 18 | Demonstration of Inj. Ivermectin for control of ecto-endo parasitic infestation in dairy cattle | KAU & Tanuvas | Cross bred | 0 | 1 | 2 | - |
| 19 | Prrophylactic management of New castle disease in poultry using oral pellet vaccine | Tanuvas | Hybrid &indigenous | 0 | 1 | 2 | - |

**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 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 20 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 15 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 3 | 7 | 0 | 0 | 15 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 60 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 26 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 31 | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 32 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 46 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 60 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | 4 | 6 | 0 | 0 | 63 | 67 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 18 | 79 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | 0 | 0 | 0 | 0 | 7 | 13 | 0 | 0 | 68 | 98 | 0 | 0 | 0 | 0 | 0 | 0 |

**PART IV - On Farm Trial**

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

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

**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:** Nil.

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technology assessed** | **No. of trials** | **Number of farmers** | **Area in ha (Per trail covering all the Technological Options)** |
| Integrated Nutrient Management | Tapioca | Management practices for secondary and micronutrient disorders in tapioca | 5 | 5 | 0.18 |
| Crop improvement | Carrot | Assessing the suitable carrot varities for Idukki district. | 5 | 5 | 0.06 |
| Integrated Nutrient Management |  |  |  |  |  |
| Varietal Evaluation | Broccoli | Palam Samrdhi & F1 green magic | 5 | 5 | 0.012 |
| Black pepper | Assessment of suitable black pepper foot rot (quick wilt) resistant variety for Idukki district | 5 | 5 | 0.04 |
| Integrated Pest Management | Cardamom | Management of snails & slugs in cardamom plantation | 5 | 5 | 0.05 |
|  |  |  |  |  |
| Integrated Crop Management | Banana | Assessment of different props and support for mitigating wind damage in banana (Nendran) | 5 | 5 | 1 |
|  |  |  |  |  |
| Integrated Disease Management |  |  |  |  |  |
|  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |
|  |  |  |  |  |
| Weed Management |  |  |  |  |  |
|  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  |  |
|  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |
|  |  |  |  |  |
| Value addition |  |  |  |  |  |
|  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |
|  |  |  |  |  |
| Storage Technique |  |  |  |  |  |
|  |  |  |  |  |
| Mushroom cultivation | Mushroom | Preparation of cropping calendar with two types of mushrooms for year round production in Idukki district | 4 | 4 | 4 units |
|  |  |  |  |  |
| **Total** |  |  |  |  |  |

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

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

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

**4. C1.** **Results of Technologies Assessed**

**Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Parameters of assessment** | **Data on the parameter** | **Results of assessment** | **Feedback from the farmer** | **Any refinement needed** | **Justification for refinement** |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Tapioca | Irrigated | Soil acidity leads to zinc and Boron deficiency resulting in low yield | Management practices for secondary & micronutrient disorders for Tapioca in acid soils | 5 | Management practices for secondary and micronutrient disorders in tapioca | 1) Weight of tubers/clump (Kg)  2) Yield (t/ha)  3) BCR | - | Foliar spray was found effective for managing secondary and micronutrient disorders | - | - | - |
| Carrot | irrigated | Non-availability of high yielding varieties | Assessment of suitable carrot varieties in Idukki district. |  | Assessing Pusa Rudhira and Pusa Nayanjyothi | 1)Average weight of tubers  2) Yield t/ha | - | Pusa Rudhira variety was found better in yield and weight of tubers | - | - | - |
| Broccoli | Limited Irrigation | Low popularity of exotic vegetables | Assessment of suitable varieties of broccoli for high ranges | 5 | Palam Samrdhi & F1 green magic | 1) Days to harvesting the head  2) Weight of head (g)  3) Yield (tonnes/acre) | T1: 67.8  T2: 66.4  T1: 230  T2: 303.2  T1: 2.88  T2: 3.79 | Crop shown best result in rain shelter and polyhouse | Varieties assessed is not suitable for open condition. | - | - |
| Black pepper | Perennial | High susceptibility to foot rot disease of cultivated varieties | Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District | 5 | 1. Farmers practice (Chengannoor)  2. IISR –Thevam  3. Ashwati  4. Suvarna | % reduction in quick wilt incidence &  Yield | Comparative Foot rot incidence evaluation in Black Pepper | Ongoing | IISR-Thevam is showing least percentage of quick wilt disease incidence compared to farmer developed varieties and check | - | - |
| Cardamom | Perennial | Snails & slugs damage on the flowers and young berries of cardamom plants, leading to considerable economic loss | Management of snails & slugs in cardamom plantation | 5 | Spray of Vinegar @ 10ml / litre  Spray of Coffee powder @ 10g / litre Yeast & Honey Mixture @ (100g:100ml) / litre (as trap) | Reduction in snail & slug population at different days (30,40 & 60) after treatment | - | Foliar spray of vinegar @ 10 ml/L of water effectively managed snails and slugs in cardamom field | - | - | - |
| Mushroom | homestead | Large demand & inadequate supply | Preparation of cropping calendar with two types of mushrooms for year round production in Idukki district | 4 | Assessing the suitability of oyster and milky mushrooms in different calendar months | 1) Yield of mushrooms per bed  2) BCR | 0.84 | Ongoing | Oyster Mushroom yielding good in the months from October till March, Milky Mushroom beds have been prepared in March. Shall be over by September 2016 | - | - |
| Banana | Irrigated | Lodging of banana plants nearing maturity | Assessment of different props and support for mitigating wind damage in banana (Nendran) | 5 | Stabilizing banana plants using props and supports and by using collar rings | Extent of wind damage | - | Ongoing | - | - | - |

**Contd..**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Technology Assessed** | **Source of Technology** | **Production** | **Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)** | **Net Return (Profit) in Rs. / unit** | **BC Ratio** |
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (FP - No measures) | - | 20 | t/ha | 28,000 | 1.25 |
| Technology option 2 (Foliar spray of 0.5% MgSO4 + 0.5% ZnSO4 at 60th and 90th DAP) | KAU | 30 | t/ha | 40,000 | 1.33 |
| Technology option 3 (Soil application of MgSO4@ 20 kg/ha + ZnSO4 @12.5 kg/ha within 2 months of planting) | TNAU | 22 | t/ha | 35,000 | 1.30 |
| Technology option 1 (FP – Local) | - | 29 | t/ha | 1,00,000 | 1.5 |
| Technology option 2 (Pusa Nayanjyothi) | IARI | 32.5 | t/ha | 1,44,400 | 1.8 |
| Technology option 3 (Pusa Rudhira) | IARI | 35 | t/ha | 1,98,750 | 2.2 |
| Technology option 1 Farmers Practice (FP) | Nil | - | - | - | - |
| Technology option 2 (Palam samrdhi) | IARI | 2.88 | t/acre | - | - |
| Technology option 3 (F1 Green magic) | Sakata (Pvt. company) | 3.79 | t/acre | - | - |
| Technology option 1 (FP - Chengannoor variety Black pepper) | Local | - | - | - | *Ongoing* |
| Technology option 2 (IISR Thevam variety Black pepper) | IISR | - | - | - |
| Technology option 3 (Ashwati variety Black pepper) | Farmers developed variety from Wyanad | - | - | - |
| Technology option 4 (Suvarna variety Black pepper) | Farmers developed variety from Wyanad | - | - | - |
| Technology option 1 (FP - Use of chemicals as directed by pesticide retail shops) | - | 212 | Kg/ha | 127200 | 1.10 |
| Technology option 2 (Spray of Vinegar @ 10ml / litre) | OFT-ATMA & ITK | 519 | Kg/ha | 311400 | 1.49 |
| Technology option 3 (Spray of Coffee powder @ 10g / litre) | OFT-ATMA & ITK | 503 | Kg/ha | 301800 | 1.31 |
| Technology option 4 (Yeast & Honey Mixture @ (100g:100ml) / litre (as trap)) | OFT-ATMA & ITK | 266 | Kg/ha | 159600 | 1.20 |
| Technology option 1 (Oyster Mushroom) | KAU | 0.84 | Kg/bed | ongoing | - |
| Technology option 2 (Milky Mushroom) | KAU | Ongoing | - | - | - |
| Technology option 1  (Single propping) | Farmers practice | Ongoing | - | - | - |
| Technology option 2  (Single propping coupled with tying with nylon ropes) | OFT conducted by KVK Idukki | - | - | - | - |
| Technology option 3 (Collar ring method) | KAU | - | - | - | - |

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

details

**1)**

1 Title of Technology Assessed: **Management practices for secondary and micronutrient disorders in tapioca**

2 Problem Definition: Soil acidity leads to Zn and mg Deficiency resulting in low yield.

3 Details of technologies selected for assessment:

**Tech-1**: No measures taken (Farmers practice)

**Tech-2**: Foliar spray of 0.5% MgSO4 + 0.5% ZnSO4 at 60th and 90th DAP

**Tech-3**: Soil application of MgSO4@ 20 kg/ha + ZnSO4 @12.5 kg/ha within 2 months of planting

4 Source of technology: KAU & TNAU.

5 Production system and thematic area: Nil.

6 Performance of the Technology with performance indicators: Nil.

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

techniques: Nil.

8 Final recommendation for micro level situation: Foliar spray was found effective.

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 suitable carrot varieties in idukki district.**

2 Problem Definition: Non –availability of high yielding varieties.

3 Details of technologies selected for assessment: Use of hybrid varieties.

4 Source of technology: IARI.

5 Production system and thematic area: Crop improvement.

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: Pusa Rudhira was found effective in growth and yield

9 Constraints identified and feedback for research: Being a Red carrot variety -Pusa Rudhira farmers find it difficult for marketing in Idukki as less acceptance by people for red variety.

10 Process of farmers participation and their reaction: More in demand for cultivating Pusa Rudhira as they find it good in taste for cooking as well as eating raw.

**3)**

1 Title of Technology Assessed: **Assessment of suitable varieties of broccoli for high ranges**

2 Problem Definition: Less popularity of exotic vegetables.

3 Details of technologies selected for assessment: Palam samridhi & F1 green magic.

4 Source of technology: IARI & Sakata Pvt. Company.

5 Production system and thematic area: Limited irrigation & Crop Diversification.

6 Performance of the Technology with performance indicators: F1 green magic shown comparative best result.

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

techniques: Nil.

8 Final recommendation for micro level situation: Crop shown best result in rain shelter and polyhouse.

9 Constraints identified and feedback for research: Limited availability of quality seeds.

10 Process of farmer’s participation and their reaction: Varieties assessed is not suitable for open condition.

**4)**

1 Title of Technology Assessed: **Assessment of suitable Black Pepper Foot rot (Quick wilt) resistant variety for Idukki District**

2 Problem Definition: High susceptibility to foot rot disease of cultivated varieties.

3 Details of technologies selected for assessment: IISR-Thevam, Ashwathi and Suvarna variety Black Pepper.

4 Source of technology: IISR & Farmer developed variety.

5 Production system and thematic area: Pepper based cropping systems and Crop Improvement.

6 Performance of the Technology with performance indicators: Ongoing.

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

techniques: Ongoing.

8 Final recommendation for micro level situation: Ongoing.

9 Constraints identified and feedback for research: Ongoing.

10 Process of farmers participation and their reaction: Ongoing.

**5)**

1 Title of Technology Assessed: **Management of snails & slugs in cardamom plantation**

2 Problem Definition: Snails & slugs damage on the flowers and young berries of cardamom plants, leading to considerable economic loss

3 Details of technologies selected for assessment: Spray of Vinegar @ 10ml / litre , Spray of Coffee powder @ 10g / litre and Yeast & Honey Mixture @ (100g:100ml) / litre (as trap).

4 Source of technology: OFT-ATMA & ITK.

5 Production system and thematic area: Cardamom based system and IPM.

6 Performance of the Technology with performance indicators: Foliar spray of vinegar @ 10 ml/L of water effectively managed snails and slugs in cardamom field.

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: Foliar spray of vineagar @10ml /L of water at 30,40 and 60 days effectively managed snails and slugs in cardamom plantation.

10 Process of farmers participation and their reaction: Eco-friendly management of snails and slugs.

**6)**

1 Title of Technology Assessed: **Preparation of cropping calendar with two types of mushrooms for year round production in Idukki district.**

2 Problem Definition: Large demand & inadequate supply.

3 Details of technologies selected for assessment:

**Tech-1**: Oyster Mushroom

**Tech-2** – Milky Mushroom

4 Source of technology: KAU.

5 Production system and thematic area: Nil.

6 Performance of the Technology with performance indicators: Nil

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

techniques: Nil.

8 Final recommendation for micro level situation: Foliar spray was found effective.

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 props and support for mitigating wind damage in banana (Nendran).**

2 Problem Definition: Lodging of banana plants nearing maturity.

3 Details of technologies selected for assessment:

**Tech-1**: Single propping

**Tech-2**: Single propping coupled with tying with nylon ropes

**Tech-3:** Collar ring method

4 Source of technology: KAU & OFT conducted by KVK Idukki.

5 Production system and thematic area: Nil.

6 Performance of the Technology with performance indicators: Nil.

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

techniques: Nil.

8 Final recommendation for micro level situation: Foliar spray was found effective.

9 Constraints identified and feedback for research: Nil.

10 Process of farmers participation and their reaction: Nil.

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

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

**PART V - FRONTLINE DEMONSTRATIONS**

**5. A. Summary of FLDs implemented during 2015-16**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | Homestead | Aug-Nov & Jan-Mar | Vegetables | Local | - | Year round production on organic vegetables | Popularization of organic kitchen garden in homestead for nutritional security | 0.08 | 0.08 | 0 | 0 | 0 | - |
|  |  | Mono cropping | - | Bitter gourd | Preethi & Priyanka | - | IPDM | IPDM in bitter gourd | 2 | 2 | - | 10 | 10 | - |
|  |  | Irrigated | Rabi-2015 | Cowpea | Arka mangala | - | ICM | IIHR vegetable special | 1 | 1 | 0 | 10 | 10 | - |
|  |  | Irrigated | Rabi-2015 | Vegetables | - | - | Nursery management | Arka microbial consortium | - | - | 0 | 5 | 5 | - |
|  |  | Homestead | Year round | Mushroom | Different vegetables |  | Productivity improvement of major crops. | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in growbags | 5 units | 5 units | 0 | 5 | 5 | - |
| 6 | Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Fruit |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Spices and condiments |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.a. |  | Irrigated | Perennial crop | Cardamom | Njallani | - | Nutrient management | Soil test based fertilizer recommendation along with organic manures | 1 | 1 | 0 | 10 | 10 | - |
| 9.b. |  | Cardamom base cropping system | Perennial | Cardamom | Njallani | - | IPM | Management of cardamom root grub with (EPN) | 2 | 2 | - | 10 | 10 |  |
| 9.c. |  | Rainfed | Perennial | Black pepper | Karimunda | - | ICM | IISR Nutrient mix BP | 2 | 2 | - | 10 | 10 | - |
|  |  | Irrigated | Perennial crop | Black pepper | Karimunda | - | Crop improvement | Column Method for production of quality planting materials in Black Pepper | 0.2 | 0.2 | 0 | 3 | 3 | ongoing |
| 10 | Commercial crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Dairy | Homestead | Throughout the year | Dairy Cattle | Jersey and HF | Cross bred | Disease management | Demonstration of Inj Ivermectin for control of Ecto-Endo Parasitic Infestation in dairy cattle | 10 | 10 | 0 | 10 | 10 | - |
|  |  | Mixed Farming | Throughout the year | Dairy Cattle | Jersey and HF | Cross bred | Nutrition Management | Popularisation of fodder Cafetaria in rural households of Idukki District | 10 | 10 | 0 | 10 | 10 | - |
| 16 | Poultry | Mixed Farming | Throughout the year | Poultry | Chicken | Hybrid and indigenous breed | Scientific Disease management | Prophylactic management of Newcastle Disease in poultry using oral pellet vaccine | 20 | 20 |  | 20 | 0 | - |
| 17 | Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Common carps |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Mussels |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | Ornamental fishes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 | Implements |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Others (specify) | Irrigated | Rabi | Vegetables | Tomato, Chillies, Cowpea | - | Nursery Management | Arka Microbial consortium | - | - | - | 5 | 5 | - |

**5. A. 1. Soil fertility status of FLDs plots during 2015-16**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | Homestead farming | Aug-Nov 2015 & Jan-Mar 2016 | Vegetables | Local | - | Year round production on organic vegetables | Popularization of organic kitchen garden in homestead for nutritional security | Aug-Nov 2015 & Jan-Mar 2016 | H | H | M | | Vegetables |
|  |  | Mono | - | Bitter gourd | Preethi and Priyanka | - | IPDM | IPDM in bitter gourd | - | H | H | L | | Cowpea |
|  |  | Homestead farming | Year round | Vegetables | Local | - | Productivity improvement of major crops. | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in growbags | Year round | H | H | M | | - |
| 6 | Flowers |  |  |  |  |  |  |  |  |  |  |  | |  |
| 7 | Ornamental |  |  |  |  |  |  |  |  |  |  |  | |  |
| 8 | Fruit |  |  |  |  |  |  |  |  |  |  |  | |  |
| 9 | Spices and condiments | Irrigated | Perrinaial | Cardamom | Njallani | - | Crop improvement | Soil test based fertilizer recommendation | - | H | H | M | | - |
| Cardamom base cropping system | Perennial | Cardamom | Njallani | - | IPM | Management of cardamom root grub with (EPN) |  | H | H | L | | Perennial |
| Rainfed | Perennial | Black pepper | Karimunda | - | ICM | IISR Nutrient mix BP | - | L | H | M | | Black Pepper |
| Irrigated | Perennial | Black Pepper | Karimunda |  | Crop improvement | Column Method for production of quality planting materials in Black Pepper |  | H | H | M | | - |
| 10 | Commercial crops |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Fodder |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Plantation |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | 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 | Popularization of organic kitchen garden in homestead for nutritional security | Local | - | Homstead farming | 5 | 0.08 | 1.41 | 1.4 | 1.402 | 0.346 | 25 | 9700 | 16800 | 7100 | 1.73 | 2200 | 2830 | 630 | 1.28 |
|  | IPDM in bitter gourd | Preethi and Priyanka | - | Mono cropping | 10 | 2 ha | 1.6 | 1.1 | 1.3 | 1 | 20 | 164700 | 213840 | 49140 | 1.32 | 115000 | 150000 | 35000 | 1 |
| Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spices and condiments | Soil test based fertilizer recommendation along with organic manure | Njallani | - | Irrigated | 10 | 1 | 9.8 | 10.0 | 9.9 | 8.0 | 25.0 | 250000 | 653600 | 403600 | 2.6 | 218000 | 414200 | 196200 | 1.90 |
| Management of cardamom root grub with (EPN) | Njallani | - | Perennial | 10 | 2 ha | 1.9 | 1.2 | 1.4 | 1.2 | 24 | 306700 | 424445 | 117745 | 1.4 | 294000 | 389000 | 95000 | 1.2 |
| IISR Nutrient Mix in black pepper | Karimunda | - | Rainfed | 10 | 2 | 17.22 | 14.15 | 12.44 | 15.44 | 0 | 0 | 0 | 0 | 1.12 | 0 | 0 | 0 | 1.13 |
| Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre crops like cotton |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (Mushroom) | 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 | 0 | 0 | 0 |
| Others (pl.specify) | Arka Microbial consortium | Vegetables | - | Irrigated | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

\* 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 | Popularization of Fodder Cafetaria in rural households of idukki district. | Cross bred Cows | 10 | 10 | 13 | 18 | 14 | 13 | 15 | 13610 | 30420 | 16810 | 2.23 | 14600 | 23940 | 9340 | 1.63 |
|  | Demonstration of Inj Ivermectin for control of Ecto-Endo Parasitic Infestation in dairy cattle | Jersey and HF | 10 | 10 | 12 | 18 | 14 | 13 | 20 | 14520 | 27720 | 13200 | 1.90 | 13520 | 22500 | 8980 | 1.66 |
|  | Prophylactic management of Newcastle Disease in poultry using oral pellet vaccine | Hybrid and indigenous breed | 20 | 20 | 23 | 19 | 20 | 18 | 10 | 750 | 1280 | 530 | 1.70 | 782 | 1152 | 370 | 1.47 |
| Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

\*\* BCR= GROSS RETURN/GROSS COST

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

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

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 | 10 | 120 | - |
| 2 | Farmers Training | 14 | 419 | - |
| 3 | Media coverage | 12 | - | - |
| 4 | Training for extension functionaries | 6 | 81 | - |
| 5 | Others (Field visit) | 36 | 69 | - |
| 6 | Others (Demonstration) | 9 | 20 | - |
| 7 | Others (Fest, Carnival) | - | - | - |
| 8 | Others (FAS) | 43 | 43 | - |
| 9 | Others (Soil test campaign) | 6 | 80 | - |
| 10 | 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 |  |  |  |  |  |  |  |  |  |  |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 1 | 7 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Organic farming in vegetable) |  |  |  |  |  |  |  |  |  |  |
| Others (IPDM in Banana) |  |  |  |  |  |  |  |  |  |  |
| Others (IPDM in vegetable) |  |  |  |  |  |  |  |  |  |  |
| **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) | 1 | 15 | 0 | 15 | 0 | 0 | 0 | 15 | 0 | 15 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit |  |  |  |  |  |  |  |  |  |  |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management | 1 | 15 | 3 | 18 | 0 | 0 | 0 | 15 | 3 | 18 |
| 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 | 1 | 11 | 4 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| 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 | 3 | 0 | 18 | 18 | 0 | 15 | 15 | 0 | 33 | 33 |
| 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 | 2 | 25 | 19 | 44 | 0 | 0 | 0 | 25 | 19 | 44 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides | 2 | 70 | 30 | 100 | 6 | 4 | 10 | 76 | 36 | 112 |
| 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 | 2 | 6 | 19 | 25 | 0 | 0 | 0 | 6 | 19 | 25 |
| 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** | **13** | **149** | **97** | **246** | **06** | **19** | **25** | **137** | **110** | **247** |

**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) | 4 | 243 | 19 | 262 | 0 | 0 | 0 | 243 | 19 | 262 |
| 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 | 4 | 243 | 19 | 262 | 0 | 0 | 0 | 243 | 19 | 262 |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (Specify) |  |  |  |  |  |  |  |  |  |  |
| Others (ICM in vegetables) | 4 | 74 | 38 | 112 | 0 | 0 | 0 | 74 | 38 | 112 |
| Others (Organic farming-Vegetables) | 6 | 205 | 114 | 319 | 0 | 0 | 0 | 205 | 114 | 319 |
| Others (Mushroom cultivation) | 1 | 16 | 5 | 21 | 0 | 0 | 0 | 16 | 5 | 21 |
| Others (Mushroom cultivation) | 1 | 0 | 30 | 30 | 0 | 24 | 24 | 0 | 54 | 54 |
| **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) | 1 | 46 | 27 | 73 | 0 | 0 | 0 | 46 | 27 | 73 |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | 2 | 140 | 101 | 241 | 0 | 0 | 0 | 140 | 101 | 241 |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management | 2 | 49 | 23 | 72 | 0 | 0 | 0 | 49 | 23 | 72 |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops | 1 | 12 | 3 | 15 | 0 | 0 | 0 | 12 | 3 | 15 |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers | 2 | 94 | 16 | 110 | 0 | 0 | 0 | 94 | 16 | 110 |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Soil Conservation) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 1 | 31 | 20 | 51 | 0 | 0 | 0 | 31 | 20 | 51 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management | 1 | 11 | 7 | 18 | 0 | 0 | 0 | 11 | 7 | 18 |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology | 2 | 21 | 40 | 61 | 0 | 0 | 0 | 21 | 40 | 61 |
| 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 | 2 | 0 | 24 | 24 | 0 | 10 | 10 | 0 | 34 | 34 |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| 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 | 15 | 609 | 143 | 752 | 49 | 47 | 96 | 658 | 190 | 848 |
| Integrated Disease Management | 3 | 115 | 11 | 126 | 50 | 5 | 55 | 165 | 16 | 181 |
| Bio-control of pests and diseases | 15 | 498 | 120 | 618 | 30 | 29 | 59 | 528 | 149 | 677 |
| Production of bio control agents and bio pesticides | 4 | 102 | 30 | 132 | 74 | 30 | 104 | 176 | 60 | 236 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| 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** | **71** | **2509** | **790** | **3299** | **203** | **145** | **348** | **2712** | **935** | **3647** |

**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 |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Small scale processing |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Post Harvest Technology |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Tailoring and Stitching |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Rural Crafts | 3 | 8 | | 52 | | 60 | 5 | | 10 | | 15 | | 0 | | 75 | | 75 | |
| Production of quality animal products |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Dairying | 1 | 25 | | 19 | | 44 | | 0 | | 0 | 0 | | | 25 | 19 | | | 44 |
| 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) | 2 | 35 | | 56 | | 91 | | 0 | | 0 | 0 | | | 35 | 56 | | | 91 |
| **TOTAL** | **6** | **68** | | **127** | | **195** | **5** | | **10** | | **15** | | **60** | | **150** | | **210** | |

**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 | 1 | 6 | | 16 | | 22 | 0 | 0 | 0 | 6 | 16 | 22 |
| Bee-keeping |  |  | |  | |  |  |  |  |  |  |  |
| Sericulture |  |  | |  | |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Value addition |  |  | |  | |  |  |  |  |  |  |  |
| Small scale processing |  |  | |  | |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  | |  | |  |  |  |  |  |  |  |
| Tailoring and Stitching |  |  | |  | |  |  |  |  |  |  |  |
| Rural Crafts | 1 | 0 | | 25 | | 25 | 0 | 15 | 15 | 0 | 40 | 40 |
| 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) | 2 | 35 | | 56 | | 91 | 0 | 0 | 0 | 35 | 56 | 91 |
| Any other (Organic farming) | 1 | 33 | | 36 | | 69 | 0 | 0 | 0 | 33 | 36 | 69 |
| **TOTAL** | **5** | **74** | | **133** | | **207** | **0** | **15** | **15** | **74** | **148** | **222** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | |
| **General** | | | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | | **Total** | | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Productivity enhancement in field crops |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Nutrient management | 1 | 10 | | 04 | | 14 | 0 | 0 | 0 | 10 | 04 | 14 |
| Rejuvenation of old orchards |  |  | |  | |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  | |  | |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  | |  | |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Women and Child care |  |  | |  | |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing |  |  | |  | |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization | 1 | 2 | | 11 | | 13 | 0 | 0 | 0 | 2 | 11 | 13 |
| Information networking among farmers |  |  | |  | |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  | |  | |  |  |  |  |  |  |  |
| Management in farm animals |  |  | |  | |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  | |  | |  |  |  |  |  |  |  |
| Household food security |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  | |  | |  |  |  |  |  |  |  |
| **Total** | **2** | **12** | | **15** | | **27** | **0** | **0** | **0** | **12** | **15** | **27** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | |
| **General** | | | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | | **Total** | | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Productivity enhancement in field crops |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Nutrient management | 4 | 80 | | 86 | | 166 | 0 | 0 | 0 | 80 | 86 | 166 |
| Rejuvenation of old orchards |  |  | |  | |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  | |  | |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  | |  | |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Women and Child care |  |  | |  | |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing |  |  | |  | |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization |  |  | |  | |  |  |  |  |  |  |  |
| Information networking among farmers |  |  | |  | |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  | |  | |  |  |  |  |  |  |  |
| Management in farm animals |  |  | |  | |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  | |  | |  |  |  |  |  |  |  |
| Household food security |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl. specify) |  |  | |  | |  |  |  |  |  |  |  |
| **Total** | **4** | **80** | | **86** | | **166** | **0** | **0** | **0** | **80** | **86** | **166** |

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 |  |  |  |  |  |  |  |  |  |  |
| **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 | 9 | 90 | 153 | 243 | 0 | 6 | 6 | 90 | 159 | 249 |
| 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 | 1 | 13 | 50 | 63 | 0 | 0 | 0 | 13 | 50 | 63 |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (Poultry) | 2 | 18 | 79 | 97 | 0 | 0 | 0 | 18 | 79 | 97 |
| 10.f. | Others (Livestock production and management) | 1 | 30 | 29 | 59 | 0 | 0 | 0 | 30 | 29 | 59 |
| **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** | **13** | **151** | **311** | **462** | **0** | **6** | **6** | **151** | **317** | **468** |

**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

**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 | 1 | 10 | 20 | 30 | 0 | 2 | 2 | 10 | 22 | 32 |
| 2.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| 3.a. | Dairy farming |  |  |  |  |  |  |  |  |  |  |
| 3.b. | Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| 3.c. | Sheep and goat rearing |  |  |  |  |  |  |  |  |  |  |
| 3.d. | Piggery |  |  |  |  |  |  |  |  |  |  |
| 3.e. | Poultry farming |  |  |  |  |  |  |  |  |  |  |
| 3.f. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **4.** | **Income generation activities** |  |  |  |  |  |  |  |  |  |  |
| 4.a. | Vermi-composting |  |  |  |  |  |  |  |  |  |  |
| 4.b. | Production of bio-agents, bio-pesticides,  bio-fertilizers etc. |  |  |  |  |  |  |  |  |  |  |
| 4.c. | Repair and maintenance of farm machinery  and implements |  |  |  |  |  |  |  |  |  |  |
| 4.d. | Rural Crafts | 12 | 0 | 183 | 183 | 0 | 55 | 55 | 0 | 238 | 238 |
| 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** | **13** | **10** | **203** | **213** | **0** | **57** | **57** | **10** | **260** | **270** |

**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 | 19 | 36 | 29 | 65 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kisan Mela | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kisan Ghosthi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exhibition | 2 | 1100 | 900 | 2000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Film Show | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Method Demonstrations | 18 | 125 | 210 | 335 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farmers Seminar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Workshop | 7 | 125 | 108 | 233 | 0 | 0 | 0 | 23 | 32 | 55 |
| Group meetings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lectures delivered as resource persons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Newspaper coverage | 14 | - | - | - | - | - | - | - | - | - |
| Radio talks | 5 | - | - | - | - | - | - | - | - | - |
| TV talks | 6 | - | - | - | - | - | - | - | - | - |
| Popular articles | 2 | - | - | - | - | - | - | - | - | - |
| Extension Literature | 2 | - | - | - | - | - | - | - | - | - |
| Advisory Services | 243 | 145 | 207 | 352 | 0 | 0 | 0 | 5 | 3 | 8 |
| Scientific visit to farmers field | 63 | 46 | 27 | 73 | 10 | 5 | 15 | 0 | 0 | 0 |
| Farmers visit to KVK | 269 | 1003 | 335 | 1338 | 0 | 0 | 0 | 2 | 3 | 5 |
| Diagnostic visits | 38 | 34 | 19 | 53 | 8 | 12 | 20 | 0 | 0 | 0 |
| Exposure visits | 2 | 13 | 17 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ex-trainees Sammelan | 1 | 3 | 23 | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soil health Camp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Animal Health Camp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Agri mobile clinic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soil test campaigns | 6 | 35 | 30 | 65 | 0 | 0 | 0 | 10 | 5 | 15 |
| Farm Science Club Conveners meet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Self Help Group Conveners meetings | 9 | 22 | 54 | 76 | 13 | 15 | 28 | 26 | 18 | 44 |
| Mahila Mandals Conveners meetings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Celebration of important days (World Soil day) | 1 | 30 | 20 | 50 | 0 | 0 | 0 | 0 | 0 | 0 |
| Celebration of important days (World food day) | 1 | 11 | 22 | 33 | 0 | 0 | 0 | 0 | 0 | 0 |
| Celebration of important days (National milk day) | 1 | 25 | 19 | 44 | 0 | 0 | 0 | 0 | 0 | 0 |
| Any Other (Technology week celebration) | 5 | 549 | 180 | 729 | 0 | 0 | 0 | 30 | 16 | 46 |
| Any Other (Jai Kissan Jai Vigyan) | 4 | 30 | 10 | 40 | - | - | - | - | - | - |
| Any Other (Plant Health clinic) | 8 | 25 | 35 | 60 | 0 | 0 | 0 | 10 | 25 | 35 |
| **Total** | **726** | **3357** | **2245** | **5602** | **31** | **32** | **63** | **106** | **102** | **208** |

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

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

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Hybrid** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial |  |  |  |  |  |  |
| Vegetable seedlings |  |  |  |  |  |  |
| Fruits |  |  |  |  |  |  |
| Ornamental plants |  |  |  |  |  |  |
| Medicinal and Aromatic |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |
| Spices | Black pepper | Karimunda | - | 7110 | 71100 | 92 |
|  |  | Kottandan | - | 220 | 2630 | 20 |
|  |  | Panniyoor 1 | - | 197 | 1970 | 20 |
|  |  | Panniyoor 2 | - | 6 | 72 | 1 |
|  |  | Panniyoor 4 | - | 10 | 120 | 1 |
|  |  | Panniyoor 5 | - | 129 | 1548 | 3 |
|  |  | Panniyoor 6 | - | 6 | 72 | 1 |
|  |  | Panniyoor 7 | - | 93 | 1116 | 7 |
|  |  | Chengannor | - | 393 | 3930 | 22 |
|  |  | Thevam | - | 83 | 996 | 6 |
|  |  | Shakthi | - | 112 | 1344 | 11 |
|  |  | Malabar Excel | - | 32 | 384 | 6 |
|  |  | Kumbakkal | - | 4 | 48 | 1 |
|  |  | Thekkan | - | 75 | 2250 | 20 |
| Tuber |  |  |  |  |  |  |
| Fodder crop saplings |  |  |  |  |  |  |
| Forest Species |  |  |  |  |  |  |
| Others(specify) |  |  |  |  |  |  |
| **Total** |  |  |  | **8470** | **87580** | **211** |

**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 | Nature plus | 174 | 17400.00 | 111 |
|  | Panchakavya | 460 | 46000.00 | 105 |
|  | Jeevamirtham | 169 | 16900.00 | 97 |
|  | Farmers Effective Microorganisms | 58 | 5800.00 | 24 |
|  | Fish Amino Acids | 18 | 2700.00 | 3 |
| Bio-pesticide | Beauveria | 466 | 46600.00 | 126 |
|  | Metarhizium | 232 | 23200.00 | 95 |
|  | Lecanicillium | 92 | 9200,00 | 22 |
|  | OHN | 9 | 900.00 | 1 |
| Bio-fungicide | Trichoderma | 294 | 29400.00 | 181 |
| Bio Agents | Pseudomonas | 2064.50 | 206450.00 | 709 |
|  | Oyster Mushroom Spawn | 425 | 12750.00 | 21 |
| Others (Pheromone traps) | Cue-lure trap | 1311 | 212835.00 | 1010 |
| Others (specify) |  |  |  |  |
| **Total** |  | **5772.5** | **6,20,935.00** | **2505** |

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

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

**DROUGHT MITIGATION**

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

(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 | - | - | - |
| Technical bulletins | Farm based low cost mass production techniques of bio-pesticides | Mr. Sudhakar Soundarajan (SMS-Plant Protection) | 500 |
|  | Beauveria bassiana | Mr. Sudhakar Soundarajan | 100 |
|  | Lecanicillium lecanil | Mr. Sudhakar Soundarajan | 100 |
|  | Pseudomonas fluorescence | Mr. Sudhakar Soundarajan | 100 |
|  | Metarhizium anisopliae | Mr. Sudhakar Soundarajan | 100 |
|  | Entomo Pathogenic Nematode (EPN) | Mr. Sudhakar Soundarajan | 100 |
|  | Trichoderma harzianum | Mr. Sudhakar Soundarajan | 100 |
|  | Effective microorganism fermented plant extract (EM-FPE) | Mr. Sudhakar Soundarajan | 100 |
|  | Bacillus thuringiensis | Mr. Sudhakar Soundarajan | 100 |
|  | Pheromone trap (Cuelure trap) | Mr. Sudhakar Soundarajan | 100 |
|  | Fish amino acid (Amino plus) | Mr. Sudhakar Soundarajan | 100 |
|  | Micro organism enriched mixture solution (MEM) | Mr. Sudhakar Soundarajan | 100 |
|  | Effective micro organism treated cow urine (EMTCU) | Mr. Sudhakar Soundarajan | 100 |
|  | Farmers effective micro organism (FEM) | Mr. Sudhakar Soundarajan | 100 |
|  | Enriched effective micro organism (EEM5) | Mr. Sudhakar Soundarajan | 100 |
|  | Water soluble calcium (WS) | Mr. Sudhakar Soundarajan | 100 |
|  | Oriental herbal nutrient (OHN) | Mr. Sudhakar Soundarajan | 100 |
|  | Lactic acid bacteria (LAB) | Mr. Sudhakar Soundarajan | 100 |
|  | Plant growth promoting rhizobacteria (PGPR) | Mr. Sudhakar Soundarajan | 100 |
|  | Bio-nutrigold | Mr. Sudhakar Soundarajan | 100 |
|  | Bio-herbal nutrient | Mr. Sudhakar Soundarajan | 100 |
|  | Natural fungi bacterial controller | Mr. Sudhakar Soundarajan | 100 |
|  | Coconut - Butter milk solution | Mr. Sudhakar Soundarajan | 100 |
|  | Bio-21 (VARGAM) | Mr. Sudhakar Soundarajan | 100 |
|  | Bio-boron | Mr. Sudhakar Soundarajan | 100 |
|  | Aatotom | Mr. Sudhakar Soundarajan | 100 |
|  | Jeevamritham | Mr. Sudhakar Soundarajan | 100 |
|  | Beejamritham | Mr. Sudhakar Soundarajan | 100 |
|  | Egg-lime solution | Mr. Sudhakar Soundarajan | 100 |
|  | Vermi wash | Mr. Sudhakar Soundarajan | 100 |
|  | Panchakavya | Mr. Sudhakar Soundarajan | 100 |
|  | Nature plus | Mr. Sudhakar Soundarajan | 100 |
|  | Amruthapani | Mr. Sudhakar Soundarajan | 100 |
| Popular articles | - | - | - |
| Extension literature | Importance of micro nutrients in vegetables | Ms. Manju Jincy Varghese (SMS-Soil Science) | 1000 |
| Others (Pl. specify) |  |  |  |
| **TOTAL** |  |  | **700** |

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

**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 95 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* (tribal) colonies. To livelihood and starvation issues in these colonies are severe. Hence, the plan is to train *adivasi* girl children and start a production unit for fabric designing and jewellery making.

***2.Intervention process***

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

***3.Intervention Technology***

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

***4.Impact Horizontal Spread***

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

***5.Impact Economic Gains***

They earn an average Income per month is Rs.15000/-

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

They earn an average profit per month is Rs. 25000/-

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

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

**2. Title of the success stories :** ***NESCO Processing Unit, Thodupuzha***

**Details of success stories** :

***1.Background***

A Group consists of 12 members at Neeloor, under leadership of Mr. Baby Mathew showed interest to start the enterprise for economic empowerment.

***2.Intervention process***

* Off campus training on processing at Thodupuzha on 8th May 2015.
* Technical guidance given for product preparation and purchase of machineries

***3.Intervention Technology***

Practical classes on value products given for the unit members at Neeloor area. Value added products (Dried Jack, Dried Banana, Nutmeg Jelly, various pickles, Slip-ups) packaging techniques and marketing aspects given to the members.

***4.Impact Horizontal Spread***

Through the introduction of the units, wastage of Jack and Tapioca could minimize in the area. Popularisation of Dryer was a blessing for the farming community.

***5.Impact Economic Gains***

Nutmeg rind was wasted in that area and after the processing Practical sessions they could make use of Nutmeg rind for diversified product such as Jelly, Pickle, Extract etc.

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

Twelve members employed in the unit and they involved in the preparation and running of the unit .The group informed that they could earned Rs 60000/- through the intervention of ICAR-KVK, Idukki.

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

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

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

- Identification of courses for farmers/farm women

- Rural Youth

- Inservice personnel

**10.G. Field activities**

i. Number of villages adopted : 08

ii. No. of farm families selected : 151

iii. No. of survey/PRA conducted : 2

**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 (soil test campaign) | 300 | 300 | 3 | 90000.00 |
| Total | 2418 | 1600 | 57 | 1,95,900.00 |

Details of samples analyzed during the 2015-16:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
| Soil Samples | 134 | 77 | 40 | 6700 |
| Water Samples | 0 | 0 | 0 | 0 |
| Plant samples | 0 | 0 | 0 | 0 |
| Manure samples | 0 | 0 | 0 | 0 |
| Others (specify) | 15 | 15 | 7 | 750 |
| Total | 149 | 92 | 47 | 7450 |

**10.I. Technology Week celebration during 2015-16 Yes/No, If Yes**

Period of observing Technology Week : 19/01/2016 to 22/01/2016

Total number of farmers visited : 772

Total number of agencies involved : 11

Number of demonstrations visited by the farmers within KVK campus : 507

Other Details

| **Types of Activities** | **No. of Activities** | **Number of Farmers** | **Related crop/livestock technology** |
| --- | --- | --- | --- |
| Gosthies |  |  |  |
| Lectures organized |  |  |  |
| Exhibition |  |  |  |
| Film show |  |  |  |
| Fair |  |  |  |
| Farm Visit |  |  |  |
| Diagnostic Practical’s | 21 | 257 |  |
| Supply of Literature (No.) | 34 | 772 |  |
| Supply of Seed (q) |  |  |  |
| Supply of Planting materials (No.) |  |  |  |
| Bio Product supply (Kg) |  |  |  |
| Bio Fertilizers (q) |  |  |  |
| Supply of fingerlings |  |  |  |
| Supply of Livestock specimen (No.) |  |  |  |
| Total number of farmers visited the technology week | 8 | 772 |  |

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

A. Introduction of alternate crops/varieties: Nil.

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

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

D. Animal health camps organized : Nil.

E. Seed distribution in drought hit states: Nil.

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

G. Awareness campaign: Nil.

**PART XI. IMPACT**

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

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

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

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

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

**PART XII - LINKAGES**

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

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

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the scheme** | **Role of KVK** | **Date/ Month of initiation** | **Funding agency** | **Amount (Rs.)** |
| Development of pest surveillance and crop advisory project in Idukki District. | Created awareness and advised to the farmers to keep the pest situation below ETL level. | 10/05/2014 | Kerala State Planning Board | 6,00,000.00 |
| Vegetable Development Programme - Micro nutrient demonstration in vegetables | Creating awareness among farmers regarding soil micro nutrient deficiencies by adopting awareness soil campaigns, soil testing and trainings | 17/11/2015 | Department of Agriculture | 3,16,000.00 |
| Fruit and vegetable processing | Skill development workshop conducted for a period of 20 days. The participants were facilitated for developing their own agri-business centres. | 13/11/2015 | State Horticulture Mission | 3,27,000.00 |
| 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 2015-16**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 | 9 | 2 | **-** |
| **02** | **Research projects** |  |  |  |  |
|  |  |  |  |  |  |
| **03** | **Training programmes** | Organic Farming | 5 | 0 | **-** |
|  |  |  |  |  |  |
| **04** | **Demonstrations** |  |  |  |  |
|  |  |  |  |  |  |
| **05** | **Extension Programmes** |  |  |  |  |
|  | Kisan Mela | 1 | 3 | 0 | **-** |
|  | 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)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Demo Unit | Year of  establishment | Area  (ha) | Details of production | | | Amount (Rs.) | | Remarks |
| Variety | Produce | Qty. | Cost of inputs | Gross income |
| 1. | Mist Chamber | 2009 | 96 m2 | Panniyoor-1, 4, 5, 6 & 7 Sreekara  Subhakara  Panchami  IISR Thevam  IISR Shakthi  Excel  Kottanadan  Karimunda  Chengannoor  Thekken  Girimunda  Arimundi | Pepper vines | 6890 rooted cuttings | 20670.00 | 74584.00 | Funded by SHM |
| 2. |  |  |  |  |  |  |  |  |  |

**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. | Nature plus | 174 | 5220 | 12180 | - |
| 2. | Panchakavya | 460 | 16100 | 29900 | - |
| 3. | Jeevamirtham | 169 | 4225 | 21675 | - |
| 4. | Farmers Effective Microorganisms | 58 | 2030 | 3770 | - |
| 5. | Fish Amino Acids | 18 | 720 | 1800 | - |
| 6. | Beauveria | 466 | 18640 | 27960 | - |
| 7. | Metarhizium | 232 | 9280 | 139820 | - |
| 8. | Lecanicillium | 92 | 3680 | 5520 | - |
| 9. | OHN | 9 | 150 | 750 | - |
| 10. | Trichoderma | 294 | 13524 | 15876 | - |
| 11. | Pseudomonas | 2064.50 | 82580 | 123870 | - |
| 12. | Cue-lure trap | 1311 | 117990 | 94845 | - |
| 13. | Oyster Mushroom Spawn | 425 | 8168 | 12750 | - |

**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 2015-16. |

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

**PART XIV - FINANCIAL PERFORMANCE**

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bank account** | **Name of the bank** | **Location** | **Branch code** | **Account Name** | **Account Number** | **MICR Number** | **IFSC Number** |
| Revolving Fund Account | State Bank of Travancore | Rajakumary | 70453 | Bapooji Krishi Vigyan Kendra (Rev Fund) | 67155078042 | 685009806 | SBTR0000453 |
| Main Grant Account | State Bank of Travancore | Rajakumary | 70453 | Bapooji Sevak Samaj Krishi Vigyan Kendra | 57060836995 | 685009806 | SBTR0000453 |

**14.B. Utilization of KVK funds during the year 2015-16 (Rs. in lakh)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 89.41 | 89.41 | 89.41094 |
| 2 | **Traveling allowances** | 0.90 | 0.90 | 0.77626 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 1.00 | 1.00 | 1.00 |
| *B* | POL, repair of vehicles, tractor and equipments | 1.00 | 1.00 | 1.00 |
| *C* | Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained) | 0.25 | 0.25 | 0.25 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 0.25 | 0.25 | 0.25 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 1.59 | 1.59 | 1.59 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 0.86 | 0.86 | 0.86 |
| *G* | Training of extension functionaries | 0.00 | 0.00 | 0.00 |
| *H* | Maintenance of buildings | 0.00 | 0.00 | 0.00 |
| *I* | Farmer’s Field School |  |  | 0.00 |
| *J* | Integrated Farming System | 0.00 | 0.00 | 0.00 |
| *K* | Extension Activities | 0.50 | 0.50 | 0.50 |
| *L* | Library | 0.00 | 0.00 | 0.05 |
| **TOTAL (A)** | | **95.81** | **95.81** | **95.6872** |
| **B. Non-Recurring Contingencies** | |  |  |  |
| 1 | **Works** | 0.00 | 0.00 | 0.00 |
| 2 | **Equipments including SWTL & Furniture** | 0.00 | 0.00 | 0.00 |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 0.00 | 0.00 | 0.00 |
| 4 | **Library** (Purchase of assets like books & journals) | 0.00 | 0.00 | 0.00 |
| **TOTAL (B)** | | **0.00** | **0.00** | **0.00** |
| **C. REVOLVING FUND** | | **0.00** | **0.00** | **0.00** |
| **GRAND TOTAL (A+B+C)** | | **95.81** | **95.81** | **95.6872** |

**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 2013 to March 2014 | 6.87195 | 13.99190 | 16.97957 | 3.88428 |
| April 2014 to March 2015 | 4.59576 | 18.60745 | 21.91030 | 0.58143 |
| April 2015 to March 2016 | 3.57322 | 10.48146 | 9.89920 | 1.16369 |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the staff** | **Designation** | Title of the training programme | Institute where attended | Dates |
| Dr. Binu John Sam | Subject Matter Specialist (Horticulture) & Programme Coordinator i/c. | Capacity building programme on protected cultivation | Kerala Agricultural University, Thrissur | 29/02/2016 to 01/03/2016 |
| Dr. Benjamin Mathew | Subject Matter Specialist (Agriculture Ext.) | Post harvest technologies of fresh fruits and vegetables for commercial trade | CFTRI, Mysore | 27/07/2015 to 31/07/2015 |
| Mr. Sudhakar Soundarajan | Subject Matter Specialist (Plant Protection) | Low cost mass production of techniques of Trichoderma, Pseudomonas, Beauveria, Metarhizium, Verticellium and BM | ICAR-NBAIR, Bengaluru | 16/11/2015 to 19/11/2015 |

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

**Workshop on Fruit and Vegetable Processing: -**

10 days workshop on Fruit & vegetable processing held at ICAR- Krishi Vigyan Kendra, Santhanpara from 12th -27th October 2015. State Horticultural Mission, Kerala sponsored the workshop and 32 persons participated. Theory and practical sessions were arranged on processing. The Programme enriched with Study Tour to the Food product unit, Sanniyasioda.

**SUMMARY FOR 2015-16**

# I. TECHNOLOGY ASSESSMENT

**Summary of technologies assessed under various crops**

|  |  |  |  |
| --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technology assessed** | **No. of trials** |
| Integrated Nutrient Management | Tapioca | Management practices for secondary and micronutrient disorders in tapioca | 5 |
| Carrot | Assessment of suitable carrot varieties for Idukki district | 5 |
| Varietal Evaluation | Broccoli | Assessment of suitable varieties of broccoli for high ranges | 5 |
| Black pepper | Assessment of suitable black pepper foot rot (quick wilt) resistant variety for Idukki district | 5 |
| Integrated Pest Management | Cardamom | Management of snails & slugs in cardamom plantation | 5 |
|  |  |  |
| Integrated Crop Management | Banana | Assessment of different props and support for mitigating wind damage in banana (Nendran) | 5 |
|  |  |  |
| Integrated Disease Management |  |  |  |
|  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |
|  |  |  |
| Weed Management |  |  |  |
|  |  |  |
| Resource Conservation Technology |  |  |  |
|  |  |  |
| Farm Machineries |  |  |  |
|  |  |  |
| Integrated Farming System |  |  |  |
|  |  |  |
| Seed / Plant production |  |  |  |
|  |  |  |
| Value addition |  |  |  |
|  |  |  |
| Drudgery Reduction |  |  |  |
| Storage Technique |  |  |  |
|  |  |  |
| Mushroom | Oyster mushroom | Preparation of cropping calendar with two types of mushrooms for year round production in Idukki district | 4 |
|  |  |  |
| **Total** | | | **34** |

**Summary of technologies assessed under livestock:** Nil.

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

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

# II. TECHNOLOGY REFINEMENT: Nil.

**Summary of technologies refined under various crops**

**Summary of technologies assessed under refinement of various livestock:** Nil**.**

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

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

**III. FRONTLINE DEMONSTRATION**

**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** | Year round production of organic vegetables | Popularization of organic kitchen garden in homesteads for nutritional security | 1 | 5 | 0.08 | 1.402 | 0.346 | 25 | 0 | 0 | 9700 | 16800 | 7200 | 1.73 | 2200 | 2830 | 630 | 1.28 |
| IPM | IPDM in Bitter gourd | 1 | 10 | 2 | 16 | 10 | 20 | 0 | 0 | 164700 | 213840 | 49140 | 1.32 | 115000 | 150000 | 35000 | 1 |
| Nursery management (Vegetables) | Demonstration of Arka Microbial Consortium enriched Coco peat for protray vegetable nursery | 1 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ICM | Demonstration of IIHR vegetable special in cowpea var. Arka Mangala | 1 | 10 | 1 | Ongoing | | | | | | | | | | | | |
| **Flowers** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ornamental** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fruit** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fibres like Cotton** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Spices and condiments** | IPM | Column Method for production of quality planting materials in Black Pepper | 1 | 3 | 15 poles | Ongoing | | | | | | | | | | | | |
| IPM | Management of cardamom root grub with (EPN) | 1 | 10 | 2 | 19 | 12 | 24 | 0 | 0 | 306700 | 424445 | 117745 | 1.4 | 294000 | 389000 | 95000 | 1.2 |
| INM | Soil test based fertilizer recommendation along with organic manure | 1 | 10 | 1 | 9.9 | 8.0 | 25 | 0 | 0 | 250000 | 653600 | 403600 | 2.6 | 218000 | 414200 | 196200 | 1.90 |
| ICM | IISR Nutrient Mix in black pepper | 1 | 10 | 2 | 12.44 | 15.44 | 0 | 0 | 0 | 0 | 0 | 0 | 1.12 | 0 | 0 | 0 | 1.13 |
| **Commercial crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Medicinal and aromatic** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fodder** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Plantation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fibre** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Others (pl.specify)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Others (Mushroom)** | Productivity improvement of major crops. | Utilization of Spent Mushroom Compost (SMC) as a medium for vegetable production in grow bags | 1 | 5 | 50 bags | 172 | 144 | 19.44 | Visual stand very good | Good | 1384.66 | 3435.50 | 2050.84 | 1.97 | 0 | 0 | 0 | 0 |
| **Others (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

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 | Animal nutrition and production management | Popularization of Fodder Cafetaria in rural households of idukki district. | 1 | 10 | 10 | 13 | 18 | 14 | 13 | 15 | 13610 | 30420 | 16810 | 2.23 | 14600 | 23940 | 9340 | 1.63 |
|  | Disease management | Demonstration of Inj Ivermectin for control of Ecto-Endo Parasitic Infestation in dairy cattle | 1 | 10 | 10 | 12 | 18 | 14 | 13 | 20 | 14520 | 27720 | 13200 | 1.90 | 13520 | 22500 | 8980 | 1.66 |
| Poultry | Scientific Disease management | Prophylactic management of Newcastle Disease in poultry using oral pellet vaccine | 1 | 20 | 20 | 23 | 19 | 20 | 18 | 10 | 750 | 1280 | 530 | 1.70 | 782 | 1152 | 370 | 1.47 |
| **Rabbitry** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Pigerry** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Sheep and goat** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Duckery** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **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**

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

IV. Training Programme

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |  |  |  |  |  |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 1 | 7 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Organic farming in vegetable) |  |  |  |  |  |  |  |  |  |  |
| Others (IPDM in Banana) |  |  |  |  |  |  |  |  |  |  |
| Others (IPDM in vegetable) |  |  |  |  |  |  |  |  |  |  |
| **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) | 1 | 15 | 0 | 15 | 0 | 0 | 0 | 15 | 0 | 15 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit |  |  |  |  |  |  |  |  |  |  |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management | 1 | 15 | 3 | 18 | 0 | 0 | 0 | 15 | 3 | 18 |
| 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 | 1 | 11 | 4 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| 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 | 3 | 0 | 18 | 18 | 0 | 15 | 15 | 0 | 33 | 33 |
| 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 | 2 | 25 | 19 | 44 | 0 | 0 | 0 | 25 | 19 | 44 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides | 2 | 70 | 30 | 100 | 6 | 4 | 10 | 76 | 36 | 112 |
| 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 | 2 | 6 | 19 | 25 | 0 | 0 | 0 | 6 | 19 | 25 |
| 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** | **13** | **149** | **97** | **246** | **06** | **19** | **25** | **137** | **110** | **247** |

**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) | 4 | 243 | 19 | 262 | 0 | 0 | 0 | 243 | 19 | 262 |
| 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 | 4 | 243 | 19 | 262 | 0 | 0 | 0 | 243 | 19 | 262 |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (Specify) |  |  |  |  |  |  |  |  |  |  |
| Others (ICM in vegetables) | 4 | 74 | 38 | 112 | 0 | 0 | 0 | 74 | 38 | 112 |
| Others (Organic farming-Vegetables) | 6 | 205 | 114 | 319 | 0 | 0 | 0 | 205 | 114 | 319 |
| Others (Mushroom cultivation) | 1 | 16 | 5 | 21 | 0 | 0 | 0 | 16 | 5 | 21 |
| Others (Mushroom cultivation) | 1 | 0 | 30 | 30 | 0 | 24 | 24 | 0 | 54 | 54 |
| **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) | 1 | 46 | 27 | 73 | 0 | 0 | 0 | 46 | 27 | 73 |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | 2 | 140 | 101 | 241 | 0 | 0 | 0 | 140 | 101 | 241 |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management | 2 | 49 | 23 | 72 | 0 | 0 | 0 | 49 | 23 | 72 |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops | 1 | 12 | 3 | 15 | 0 | 0 | 0 | 12 | 3 | 15 |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers | 2 | 94 | 16 | 110 | 0 | 0 | 0 | 94 | 16 | 110 |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Others (Soil Conservation) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 1 | 31 | 20 | 51 | 0 | 0 | 0 | 31 | 20 | 51 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management | 1 | 11 | 7 | 18 | 0 | 0 | 0 | 11 | 7 | 18 |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology | 2 | 21 | 40 | 61 | 0 | 0 | 0 | 21 | 40 | 61 |
| 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 | 2 | 0 | 24 | 24 | 0 | 10 | 10 | 0 | 34 | 34 |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| 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 | 15 | 609 | 143 | 752 | 49 | 47 | 96 | 658 | 190 | 848 |
| Integrated Disease Management | 3 | 115 | 11 | 126 | 50 | 5 | 55 | 165 | 16 | 181 |
| Bio-control of pests and diseases | 15 | 498 | 120 | 618 | 30 | 29 | 59 | 528 | 149 | 677 |
| Production of bio control agents and bio pesticides | 4 | 102 | 30 | 132 | 74 | 30 | 104 | 176 | 60 | 236 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| 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** | **71** | **2509** | **790** | **3299** | **203** | **145** | **348** | **2712** | **935** | **3647** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | | | | | | | |
| **General** | | | | | | **SC/ST** | | | | | | **Grand Total** | | | | |
| **Male** | **Female** | | **Total** | | | **Male** | | **Female** | | **Total** | | **Male** | | **Female** | | **Total** |
| Nursery Management of Horticulture crops |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Training and pruning of orchards |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Protected cultivation of vegetable crops |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Commercial fruit production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Integrated farming |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Seed production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Production of organic inputs |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Planting material production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Vermi-culture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Mushroom Production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Bee-keeping |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Sericulture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Value addition |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Small scale processing |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Post Harvest Technology |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Tailoring and Stitching |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Rural Crafts | 3 | 8 | | 52 | | 60 | 5 | | 10 | | 15 | | 0 | | 75 | | 75 | |
| Production of quality animal products |  |  | |  | |  | |  | |  |  | | |  |  | | |  |
| Dairying | 1 | 25 | | 19 | | 44 | | 0 | | 0 | 0 | | | 25 | 19 | | | 44 |
| 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) | 2 | 35 | | 56 | | 91 | | 0 | | 0 | 0 | | | 35 | 56 | | | 91 |
| **TOTAL** | **6** | **68** | | **127** | | **195** | **5** | | **10** | | **15** | | **60** | | **150** | | **210** | |

**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 | 1 | 6 | | 16 | | 22 | 0 | 0 | 0 | 6 | 16 | 22 |
| Bee-keeping |  |  | |  | |  |  |  |  |  |  |  |
| Sericulture |  |  | |  | |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Value addition |  |  | |  | |  |  |  |  |  |  |  |
| Small scale processing |  |  | |  | |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  | |  | |  |  |  |  |  |  |  |
| Tailoring and Stitching |  |  | |  | |  |  |  |  |  |  |  |
| Rural Crafts | 1 | 0 | | 25 | | 25 | 0 | 15 | 15 | 0 | 40 | 40 |
| 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) | 2 | 35 | | 56 | | 91 | 0 | 0 | 0 | 35 | 56 | 91 |
| Any other (Organic farming) | 1 | 33 | | 36 | | 69 | 0 | 0 | 0 | 33 | 36 | 69 |
| **TOTAL** | **5** | **74** | | **133** | | **207** | **0** | **15** | **15** | **74** | **148** | **222** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | |
| **General** | | | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | | **Total** | | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Productivity enhancement in field crops |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Nutrient management | 1 | 10 | | 04 | | 14 | 0 | 0 | 0 | 10 | 04 | 14 |
| Rejuvenation of old orchards |  |  | |  | |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  | |  | |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  | |  | |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Women and Child care |  |  | |  | |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing |  |  | |  | |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization | 1 | 2 | | 11 | | 13 | 0 | 0 | 0 | 2 | 11 | 13 |
| Information networking among farmers |  |  | |  | |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  | |  | |  |  |  |  |  |  |  |
| Management in farm animals |  |  | |  | |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  | |  | |  |  |  |  |  |  |  |
| Household food security |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  | |  | |  |  |  |  |  |  |  |
| **Total** | **2** | **12** | | **15** | | **27** | **0** | **0** | **0** | **12** | **15** | **27** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | |
| **General** | | | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | | **Total** | | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Productivity enhancement in field crops |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Nutrient management | 4 | 80 | | 86 | | 166 | 0 | 0 | 0 | 80 | 86 | 166 |
| Rejuvenation of old orchards |  |  | |  | |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  | |  | |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  | |  | |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Women and Child care |  |  | |  | |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing |  |  | |  | |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization |  |  | |  | |  |  |  |  |  |  |  |
| Information networking among farmers |  |  | |  | |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  | |  | |  |  |  |  |  |  |  |
| Management in farm animals |  |  | |  | |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  | |  | |  |  |  |  |  |  |  |
| Household food security |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl. specify) |  |  | |  | |  |  |  |  |  |  |  |
| **Total** | **4** | **80** | | **86** | | **166** | **0** | **0** | **0** | **80** | **86** | **166** |

**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 |  |  |  |  |  |  |  |  |  |  |
| **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 | 9 | 90 | 153 | 243 | 0 | 6 | 6 | 90 | 159 | 249 |
| 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 | 1 | 13 | 50 | 63 | 0 | 0 | 0 | 13 | 50 | 63 |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (Poultry) | 2 | 18 | 79 | 97 | 0 | 0 | 0 | 18 | 79 | 97 |
| 10.f. | Others (Livestock production and management) | 1 | 30 | 29 | 59 | 0 | 0 | 0 | 30 | 29 | 59 |
| **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** | **13** | **151** | **311** | **462** | **0** | **6** | **6** | **151** | **317** | **468** |

**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 | 1 | 10 | 20 | 30 | 0 | 2 | 2 | 10 | 22 | 32 |
| 2.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| 3.a. | Dairy farming |  |  |  |  |  |  |  |  |  |  |
| 3.b. | Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| 3.c. | Sheep and goat rearing |  |  |  |  |  |  |  |  |  |  |
| 3.d. | Piggery |  |  |  |  |  |  |  |  |  |  |
| 3.e. | Poultry farming |  |  |  |  |  |  |  |  |  |  |
| 3.f. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **4.** | **Income generation activities** |  |  |  |  |  |  |  |  |  |  |
| 4.a. | Vermi-composting |  |  |  |  |  |  |  |  |  |  |
| 4.b. | Production of bio-agents, bio-pesticides, bio-fertilizers etc. |  |  |  |  |  |  |  |  |  |  |
| 4.c. | Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| 4.d. | Rural Crafts | 12 | 0 | 183 | 183 | 0 | 55 | 55 | 0 | 238 | 238 |
| 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** | **13** | **10** | **203** | **213** | **0** | **57** | **57** | **10** | **260** | **270** |

V. Extension Programmes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activities** | **No. of programmes** | **No. of farmers** | **No. of Extension Personnel** | **TOTAL** |
| Advisory Services | 243 | 352 | 8 | 360 |
| Diagnostic visits | 38 | 53 | 0 | 53 |
| Field Day | 19 | 59 | 0 | 59 |
| Group discussions | 0 | 0 | 0 | 0 |
| Kisan Ghosthi | 0 | 0 | 0 | 0 |
| Film Show | 0 | 0 | 0 | 0 |
| Self -help groups | 9 | 104 | 44 | 148 |
| Kisan Mela | 0 | 0 | 0 | 0 |
| Exhibition | 2 | 2000 | 0 | 2000 |
| Scientists' visit to farmers field | 63 | 88 | 0 | 88 |
| Plant/animal health camps | 0 | 0 | 0 | 0 |
| Farm Science Club | 0 | 0 | 0 | 0 |
| Ex-trainees Sammelan | 1 | 26 | 0 | 26 |
| Farmers' seminar/workshop | 7 | 233 | 55 | 288 |
| Method Demonstrations | 18 | 335 | 0 | 335 |
| Celebration of important days (World food day) | 1 | 33 | 0 | 33 |
| Celebration of important days (World soil day) | 1 | 50 | - | 50 |
| Special day celebration (Environment day) | 0 | - | - | - |
| Celebration of important days (National milk day) | 1 | 44 | 0 | 44 |
| Exposure visits | 2 | 30 | 0 | 30 |
| Others (TV Coverage) | 6 | - | - | - |
| Others (Soil campaign) | 6 | 35 | 30 | 65 |
| Others (pl.specify) |  |  |  |  |
| **Total** |  |  |  |  |

Details of other extension programmes

|  |  |
| --- | --- |
| **Particulars** | **Number** |
| Electronic Media | - |
| Extension Literature | 1000 |
| News Letter | - |
| News paper coverage | 10 |
| Technical Articles | - |
| Technical Bulletins | 33 |
| Technical Reports | - |
| Radio Talks | 5 |
| TV Talks | 6 |
| Animal health camps | - |
| Others (pl.specify) | - |
| **Total** |  |

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

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

# Production of planting materials by the KVKs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Hybrid** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial |  |  |  |  |  |  |
| Vegetable seedlings |  |  |  |  |  |  |
| Fruits |  |  |  |  |  |  |
| Ornamental plants |  |  |  |  |  |  |
| Medicinal and Aromatic |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |
| Spices | Black pepper | Karimunda | - | 7110 | 71100 | 92 |
|  |  | Kottandan | - | 220 | 2630 | 20 |
|  |  | Panniyoor 1 | - | 197 | 1970 | 20 |
|  |  | Panniyoor 2 | - | 6 | 72 | 1 |
|  |  | Panniyoor 4 | - | 10 | 120 | 1 |
|  |  | Panniyoor 5 | - | 129 | 1548 | 3 |
|  |  | Panniyoor 6 | - | 6 | 72 | 1 |
|  |  | Panniyoor 7 | - | 93 | 1116 | 7 |
|  |  | Chengannor | - | 393 | 3930 | 22 |
|  |  | Thevam | - | 83 | 996 | 6 |
|  |  | Shakthi | - | 112 | 1344 | 11 |
|  |  | Malabar Excel | - | 32 | 384 | 6 |
|  |  | Kumbakkal | - | 4 | 48 | 1 |
|  |  | Thekkan | - | 75 | 2250 | 20 |
| Tuber |  |  |  |  |  |  |
| Fodder crop saplings |  |  |  |  |  |  |
| Forest Species |  |  |  |  |  |  |
| Others(specify) |  |  |  |  |  |  |
| **Total** |  |  |  | **8470** | **87580** | **211** |

**Production of Bio-Products**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bio Products** | **Name of the bio-product** | **Quantity** | **Value (Rs.)** | **No. of Farmers** |
| **Kg** |
| Bio Fertilizers | Nature plus | 174 | 17400.00 | 111 |
|  | Panchakavya | 460 | 46000.00 | 105 |
|  | Jeevamirtham | 169 | 16900.00 | 97 |
|  | Farmers Effective Microorganisms | 58 | 5800.00 | 24 |
|  | Fish Amino Acids | 18 | 2700.00 | 3 |
| Bio-pesticide | Beauveria | 466 | 46600.00 | 126 |
|  | Metarhizium | 232 | 23200.00 | 95 |
|  | Lecanicillium | 92 | 9200,00 | 22 |
|  | OHN | 9 | 900.00 | 1 |
| Bio-fungicide | Trichoderma | 294 | 29400.00 | 181 |
| Bio Agents | Pseudomonas | 2064.50 | 206450.00 | 709 |
|  | Oyster Mushroom Spawn | 425 | 12750.00 | 21 |
| Others (Pheromone traps) | Cue-lure trap | 1311 | 212835.00 | 1010 |
| Others (specify) |  |  |  |  |
| **Total** |  | **5772.5** | **6,20,935.00** | **2505** |

# Production of livestock and related enterprise materials: Nil.

**VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2015-16**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Samples | **No. of Samples** | **No. of Farmers** | **No. of Villages** | **Amount realized (Rs.)** |
| Soil | 134 | 77 | 40 | 6700 |
| Water | 0 | 0 | 0 | 0 |
| Plant | 0 | 0 | 0 | 0 |
| Manure | 0 | 0 | 0 | 0 |
| Others (Specify) | 15 | 15 | 7 | 750 |
| **Total** | 149 | 92 | 47 | 7,450 |

VIII. SCIENTIFIC ADVISORY COMMITTEE

|  |
| --- |
| **Number of SACs conducted: One** |
|  |

**IX. NEWSLETTER**

|  |
| --- |
| **Number of issues of newsletter published:** Nil. |
|  |

**X. RESEARCH PAPER PUBLISHED**

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

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

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

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