**KRISHI VIGYAN KENDRA CHAMARAJANAGARA**

**ANNUAL REPORT- 2021**

**(FOR THE PERIOD FROM 01 January, 2021 TO 31 December, 2021 along with good action oriented photographs in jpeg format for all activities of KVK with size of more than 2 MB need to be sent separately with caption in the file name)**

|  |  |  |
| --- | --- | --- |
| **Name of the Senior Scientist and Head & contact details:** | **Name, address and contact details of KVK:** | **Name and address of host organization** |
|  |  |  |

**GENERAL INSTRUCTIONS**

**Please read the following instructions very carefully before starting preparation of the report.**

* Annual report is the most important document for the KVK and it directly reflects the overall achievements pertaining to the reported period. Hence due care needs to be given by each KVK while preparing the report.
* Period of Report is from 01 January, 2021 to 31 December, 2021.
* Action photographs with relevant captions covering all OFTS/FLDS/TRAINING/EXTENSION activities of the KVK in High resolution should be submitted separately in a CD/DVD along with this report. A part from this, soft copy of the activity wise photos may be submitted in JPEG format.
* Prepare Summary tables carefully tallying with the relevant portions of the main report on all aspects.
* Retain the blank column and rows as such and do not merge the cells. Please specify NIL, wherever not applicable or details are not available.
* Check the names of varieties and hybrids and specify in the report.
* Check the units and totals of each data table.
* Extension activity under celebrations for each important day, please insert separate rows and give appropriate data separately. Clubbing of data should be avoided.
* Success stories/case studies should be supported with data tables and graphs. Without photos success stories will not be considered for inclusion in Annual Report of ATARI.

PART I – GENERALINFORMATION 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 KVK CHAMARAJANAGARA | 08226-297050 | - | [kvkchnagara@gmail.com](mailto:kvkchnagara@gmail.com)  kvk.Chamarajanagar@icar.gov.in | http://www.kvkchamarajanagar.com |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Address | Telephone | | E mail | **Web Address** |
| Office | FAX |
| UAS, GKVK Bangalore | 080-23330153 | 080-23330277 | uas.vc@uasbir.kar.nic | [www.uasbanagalore.edu.in](http://www.uasbanagalore.edu.in) |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Telephone / Contact | | |
| Residence | Mobile | Email |
| Dr. Chandrakala Hanagi | 9886642978 | 9449866933 | kvk.chamarajanagar@icar.gov.in |

1.4. Year of sanction: 2004

**1.5. Staff position as on 31 December 2021**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Sanctioned post** | **Name of the incumbent** | **Designation** | **M/F** | **Discipline** | **Highest Qualification**  **(for PC, SMS and Prog. Asstt.)** | **Pay**  **Scale** | **Basic pay** | **Date of joining KVK** | **Permanent**  **/Temporary** | **Category (SC/ST/**  **OBC/**  **Others)** |
| 1 | Head/Senior Scientist | Dr. Chandrakala Hanagi | Senior Scientist and Head (i/c) | F | Food and Nutrition | Ph.D | 79800-211500 | 104100 | 12-03-07 | Permanent | OBC |
| 2 | Scientist/SMS | Mr. Yogesh.G.S | Scientist (SS &AC) | M | Soil Science | M.Sc | 68900-205500 | 92500 | 22-10-08 | Permanent | SC |
| 3 | Scientist/SMS | Mr. Mohan Kumar. A.B | Scientist (Horticulture) | M | Horticulture | M.Sc | 57700-182400 | 79900 | 17-11-11 | Permanent | SC |
| 4 | Scientist/SMS | Mr. Chandrashekar S Kallimani | Scientist (Sericulture) | M | Sericulture | M.Sc | 57700-182400 | 75300 | 22.06.19 | Permanent | Others |
| 5 | Scientist/SMS | Dr. Sunil. C.M | Scientist (Agronomy) | M | Agronomy | Ph.D | 57700-182400 | 63000 | 30.01.18 | Permanent | Others |
| 6 | Scientist/SMS | Mr. Abhishek P.S | Scientist (Agril. Extn.,) | M | Agril. Extn., | M.Sc | - | 40000 consolidated | 14.10.19 | Temporary | Others |
| 7 | Scientist/SMS | - | - | - | - | - | - | - | - | - | - |
| 8 | Programme Assistant  (Lab Tech.) | Mr. BapuradaPompana Gouda | Programme Assistant (Lab) | M | - | M.Sc | 9300-34,800  4600 AGP | 53600 | 01-04-11 | Permanent | Others |
| 9 | Programme Assistant (Computer) | Mr. G.B. Viswanath | Programme Asst. (Computer) | M | - | B.Sc  (Electronics) | 9300-34,800  4200 AGP | 52000 | 19-04-12 | Permanent | Others |
| 10 | Programme Assistant/ Farm Manager | Mr. Mareppa. K | Farm Manager | M | - | M.Sc (Agri) | Consolidated | 24300 consolidated | 01-07-21 | Temporary | OBC |
| 11 | Assistant | Mr. Yashavanthakumar. S | Assistant | M | - | M.S.W | 30350-750-32600-850-36000-950-58250 | 31850 | 23.03.2020 | Permanent | SC |
| 12 | Jr. Stenographer | Mr. Mahadevaswamy. K.S | Jr. Stenographer | M | - |  | Consolidated | 19642 consolidated | 03.09.18 | Temporary | SC |
| 13 | Driver – 1 | Mr.Subash Chandra H Manakur | Tractor Driver | M | -- | -- | 27650-650-52650 | 36000 | 23-10-08 | Permanent | ST |
| 14 | Driver – 2 | Mr. Madesha | Jeep Driver | M | -- | -- | - | 15660 consolidated | 09-02-08 | Temporary | SC |
| 15 | SS-1 | Mr. Puttaswamy | Watchman | M | -- | -- | - | 12960 consolidated | 16-01-17 | Temporary | SC |
| 16 | SS-2 | Mr. Ningaraju. C.E | Asst Cook cum caretaker | M | -- | SSLC | 18600-450-32600 | 24600 | 17-10-08 | Permanent | SC |

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

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Item** | **Area (ha)** |
| 1 | Under Buildings | 1.63 |
| 2. | Under Demonstration Units | 0.40 |
| 3. | Under Crops | 15.64 |
| 4. | Orchard/Agro-forestry | 0.04 |
| 5. | Others | - |

**1.7. Infrastructural Development:**

**A) Buildings**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Name of building** | **Source of funding** | **Stage** | | | | | |
| **Complete** | | | **Incomplete** | | |
| **Completion Date** | **Plinth area**  **(Sq. m)** | **Expenditure**  **(lakhs)** | **Starting**  **Date** | **Plinth area**  **(Sq. m)** | **Status of construction** |
| 1 | Administrative Building | ICAR | July-08 | 550 | 50.00 | - | - | - |
| 2 | Farmers Hostel | ICAR | July-08 | 305 | 32.00 | - | - | - |
| 3 | Staff Quarters (6) | ICAR | July-08 | 400 | 42.00 | - | - | - |
| 4 | **Demonstration Units** |  |  |  |  | - | - | - |
| Dairy Unit | ICAR | July -08 | 80 | 3.73 | - | - | - |
| Sericulture | ICAR | July- 08 | 80 | 5.00 | - | - | - |
| Bio Fuel | KSBDB, GoK | May-10 | -- | 10.00 | - | - | - |
| 5 | Compound wall  and chain  link Fencing | ICAR & UAS B | Mar-19 | 925 mts | 39.00 | - | - | - |
| 6 | Irrigation Pipe Line | UAS, Bangalore | Oct 07 | - | 0.99 | - | - | - |
| 7 | Poly House | UAS, Bangalore | May-08 |  | 0.95 | - | - | - |
| 8 | Rain Water harvesting  system,  Farm pond | UAS, Bangalore | 2013 |  | 1.00 | - | - | - |
| Dept. of Agri. | 2015 |  | 2.50 | - | - | - |
| 9 | Threshing floor | UAS, Bangalore | March-08 | - | 1.00 | - | - | - |
| 10 | Seed godown | RKVY | Jan-13 | 236 | 35.00 | - | - | - |
| 11 | Soil Test Lab | ICAR | Mar-11 | - | 14.00 | - | - | - |
| 12 | Overhead tank | UAS, Bangalore | 2013 |  | 11.00 | - | - | - |
| 13 | Custom hiring centre | IFSD | 2016 | - | 20.00 | - | - | - |
| 14 | Vehicle shed | UAS, Bangalore | Feb-18 | - | 2.50 | - | - | - |
| 15 | Sales counter | UAS, Bangalore | Dec - 15 - 2021 |  | 2.00 |  |  |  |

B) Vehicles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of vehicle** | **Year of purchase** | **Cost (Rs.)** | **Total kms. Run** | **Present status** |
| Bolero jeep | 2017 | 6,66,162 | 91731 | Good |
| Motor cycle | 2004 | 40,000 | 71590 | Under frequent repair |
| Motor cycle | 2009 | 50,000 | 62845 | Satisfactory |
| Tractor | 2004 | 5,00,000 | 4576 Hrs. | Under frequent repair |

**C) Lab equipment & AV aids**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Name of Equipments** | **Date of purchase** | **Cost (Rs.)** | **Present status** |
|  | T. V. | 2004 | Gift | Good |
|  | Computer with accessories | 2006 | 46,000 | Not working |
|  | Generator | 2007 | 34,785 | Good |
|  | Computer with accessories-2 Nos | 2008 | 75,000 | Good |
|  | Research Microscope | 2008 | 66,555 | Good |
|  | Touch screen information kiosk | 2008 | 1,24,569 | Not working |
|  | LG Refrigerator | 2008 | 30,750 | Good |
|  | LCD Motorized screen | 2008 | 25,875 | Not working |
|  | Ph Meter | 2008 | 6,600 | Good |
|  | Digital micro pipettes | 2008 | 21,180 | Good |
|  | ELISA reader | 2009 | 2,895 | Good |
|  | Hot air oven | 2009 | 18,370 | Good |
|  | Laminar Flow | 2009 | 44,900 | Good |
|  | Micro wave oven | 2009 | 8,000 | Good |
|  | Autoclave | 2009 | 25,500 | Good |
|  | Multi Function Centre with Fax | 2009 | 15,000 | Good |
|  | Video Camera | 2009 | 1,84,000 | Good |
|  | L G Refrigerator | 2012 | 20,900 | Good |
|  | UPS | 2012 | 21,000 | Good |
|  | Dell laptop | 2012 | 34,540 | Good |
|  | HP Printer | 2012 | 18,636 | Not Working |
|  | Nikon camera | 2012 | 30,900 | Not Working |
|  | Inoculation chamber | 2012 | 94,710 | Good |
|  | Sony camera | 2012 | 17,000 | Good |
|  | Rotary shaker | 2012 | 71,820 | Good |
|  | Double Distillation unit | 2012 | 18,810 | Good |
|  | Ribbon mixer unit | 2012 | 79,800 | Good |
|  | Computer | 2013 | 39,536 | Good |
|  | Honey processing unit | 2013 | - | Good |
|  | Lux meter | 2015 | 7,443 | Good |
|  | Sony camera | 2015 | 21,400 | Good |
|  | Autoclave | 2016 | 99,615 | Good |
|  | Exide batteries | 2016 | 82,530 | Good |
|  | UPS | 2016 | 4,500 | Good |
|  | CCTV & Accessories | 2016 | 96,522 | Good |
|  | Computer | 2016 | 46,000 | Good |
|  | Color Printer | 2017 | 17,536 | Good |
|  | Projector | 2017 | 37,980 | Good |
|  | Video Conference Unit | 2017 | - | Good |
|  | HP Laser jet printer M 1005 | 2018 | 20,744 | Good |
|  | HP Desktop 75 | 2018 | 59,062 | Good |
|  | LCD Overhead projector (Hitachi) | 2018 | 44,900 | Good |
|  | HP slimline desktop | 2018 | 45,173 | Good |
|  | HP Laptop (DAESI) | 2018 | 49,200 | Good |
|  | HP 128 printer | 2018 | 24,650 | Good |
|  | Spiral Binding machine | 2017 | 4,307 | Good |
|  | HP Desktop Core i3 (DAMU) | 2019 | 34,000 | Good |
|  | Epson Printer 3110 (DAMU) | 2019 | 11,200 | Good |
|  | GPS map device | 2019 | 41,899 | Good |
|  | Xerox MFP machine B1022 | 2020 | 72,000 | Good |
|  | Lenovo CPU Core i3 | 2020 | 26,500 | Good |
|  | External Hard disc | 2020 | 8,200 | Good |
|  | HP Desktops | 2021 | 64,000 | Good |

**D) Farm equipment and implements --- Purchasing under Progress ---**

**1.8. Details of SAC meeting organized**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Number of Participants** | **Salient Recommendations** | **Action taken** | **Remarks, if any** |
| 04.01.2022 | 62 | Improved turmeric variety IISR Pragathi has to be popularized among Turmeric growers of the district with emphasis on imparting skills staring from seed to preparation of value added products. | Action will be initiated during financial year 2022-23 |  |
| Record gender wise, category wise number of entrepreneurs emerging out of DAESI course. | Action will be initiated during financial year 2022-23 |  |
| Explore the possibility of merging Aquaponics with Hydroponics in collaboration with fisheries department. | Action will be initiated during financial year 2022-23 |  |
| Organize and conduct more number of Animal health camps. | Action will be initiated during financial year 2022-23 |  |
| Scaling up of Chaki rearing centre - explore possibility of establishing one more CRC at Gundlupete Tq., | Action will be initiated during financial year 2022-23 |  |
| Maintain Nari suvarna sheeps at KVK, Chamarajanagara sheep rearing demonstration unit. | Action will be initiated during financial year 2022-23 |  |
| Adopt Automatic cocoon harvester should be popularized among farmers. | Action will be initiated during financial year 2022-23 |  |
| Under fodder demonstrations / trials, make arrangements for the analysis of Oxalic acid content in Green fodder. | Action will be initiated during financial year 2022-23 |  |
| Boost up quantity of improved crop varieties' seeds availability at KVK. | Action will be initiated during financial year 2022-23 |  |
| Establish model nutri-garden at a morarji school in the district with emphasis on RDA based components. | Action will be initiated during financial year 2022-23 |  |
| Production of bio-agents for managing sericulture insect pests through beneficiaries of sericulture skill training at FPOs. | Action will be initiated during financial year 2022-23 |  |
| Popularize drum seeder in all paddy growing areas of the district. | Action will be initiated during financial year 2022-23 |  |

**PART II - DETAILS OF DISTRICT**

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

|  |  |
| --- | --- |
| Sl. No. | Farming system/enterprise |
| 1 | Paddy –Paddy system |
| 2 | Paddy-Pulse (Green gram/ cowpea/Bengal gram) |
| 3 | Paddy-Sugarcane as sequence crop |
| 4 | Groundnut-Bengal gram as sequence crop |
| 5 | Sunflower-Bengal gram as sequence crop |
| 6 | Sunflower-Rabi Jowar as sequence crop |
| 7 | Ragi + Redgram as intercropping system |
| 8 | Turmeric + Small onion + Chilly + Redgram intercropping system |
| 9 | Sugarcane-Sugarcane as sequence crop |
| 10 | Turmeric+ Small onion intercropping system |
| 11 | Fisheries |
| 12 | Livestock |
| 13 | Coconut-banana |
| 14 | Banana- Water melon |

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

|  |  |  |
| --- | --- | --- |
| S. No | Agro-climatic Zone | Characteristics |
| 1 | Zone 6: Southern Dry Zone of Karnataka | *Southern dry zone:*This zone extends over an area of 1.739 Mha. The annual rainfall ranges from 670.6-888.6 mm of which more than 50 % rain is received in Kharif season. The elevation is 450-900 m and the soils are red sandy loam in major areas and red loamy in the remaining areas. The principal crops grown are Rice, Ragi, Pulses, Jowar and Tobacco. |

|  |  |  |
| --- | --- | --- |
| Sl. No | Agro ecological situation | Characteristics |
| 1 | Zone – VI  (Southern dry zone of Karnataka) | Receives annual rainfall of 730 mm. Distribution of rainfall is more during May and September months. During April month high temperature (36oC) can be experienced. Low temperature is observed during December and January months. Soil type of the district is Red sandy loam and Rarely Medium black soil. Crops are growing mainly under Rain fed situation (75 %) and only 25 % of the cultivable land is under irrigation. The major source of irrigation is Canal and remaining are pump sets and dams. |

2.3 Soil type/s

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No | Soil type | Characteristics | Area in ha |
| 1 | Medium black | These soils are high in organic carbon (0.75-1.15%) and alkaline in soil reaction.  The soluble salts content of soil in terms of electrical conductivity is low (1.0 - 2.0 dS/mt).These soils are dominated by both clay and silt content as dominant soil particles and are moderately well drained. The soil depth in these soils is high (0-90cm).The available Nitrogen, Phosphorus and Potassium status are medium in range and hence classified as Medium in Fertility ratings. The secondary nutrient elements such as calcium and Magnesium are high (>1.5 meq/lit) in range where asSulphur is medium range (10-15 ppm). The DTPA extractable micronutrients such as Cu, Mn and Fe are high in range where as Zn, Boron and Molybdenum are in deficient. These soils more suitable for growing Cotton, Paddy, Sugarcane, Sunflower and Bengal gram. | 91,181 |
| 2 | Red loam | These soils well drained and all the soil separates like sand silt and clay particles are equal in proportion. The soil depth is shallow and ranges from 0-60 cm. These soils are medium in organic matter content, neutral in soil reaction (pH6.0-7.0) and soluble salt content is low (0.5-1.0 dS/mt). The available Nitrogen, Phosphorus and Potassium content is low, medium and medium in range, respectively. These soils are rich in iron and manganese content and deficient in Zn, Boron and Molybdenum content (According to the reports of NBSS & LUP). These soils suitable for growing of all cereals, pulses, oil seeds and other horticultural crops. | 81,340 |
| 3 | Red sandy loam | These soils are well drained, shallow in soil depth (0-30 cm) and low in organic carbon content (0.40-0.5%). Soils are acidic in soil reaction (pH6.0-6.5).The soils are low in soluble salts content (0.5-0.6 dS/mt) and the available major and micronutrients are low in range. These Soils suitable for growing crops like groundnut, jowar, Ragi and other leguminous crops. These soils also suitable for establishment of horticultural crops. | 27,500 |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No | Crop | Area (ha) | Production  (tons) | Productivity  (kg /ha) |
| 1 | Paddy | 6820 | 66153 | 4780 |
| 2 | Jowar | 15858 | 8512 | 345 |
| 3 | Bajra | 53 | 1055 | 2000 |
| 4 | Maize | 17599 | 143737 | 3366 |
| 5 | Ragi | 5889 | 26088 | 1103 |
| 6 | Horse gram | 22974 | 11822 | 449 |
| 7 | Black gram | 5517 | 2164 | 203 |
| 8 | Green gram | 3489 | 1043 | 189 |
| 9 | Avare | 784 | 2085 | 544 |
| 10 | Cowpea | 2388 | 1145 | 162 |
| 11 | Bengalgram | 533 | 1858 | 328 |
| 12 | Groundnut | 9296 | 12981 | 404 |
| 13 | Sunflower | 9985 | 2228 | 199 |
| 14 | Castor | 360 | 132 | 309 |
| 15 | Sesame | 188 | 663 | 219 |
| 16 | Cotton | 8975 | 575 | 1002 |
| 17 | Sugarcane | 4585 | 295545 | 130 |
| 18 | Turmeric | 8378 | 33850 | 4040 |
| 19 | Small onion | 6206 | 96844 | 15600 |
| 20 | Banana | 10040 | 233152 | 23220 |
| 21 | Potato | 469 | 9576 | 20400 |
| 22 | Tomato | 4962 | 109369 | 22000 |
| 23 | Chilly | 1025 | 12839 | 12500 |
| 24 | Cabbage | 900 | 10890 | 12100 |
| 25 | Coconut | 8668 | 845 (lakhs Nuts) | 0.1 (lakhs nuts / ha) |
| 26 | Marigold | 1005 | 10164 | 10100 |

Source : Chamarajanagara District Stats Dept.

2.5. Weather data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | Temperature 0 C | | Relative Humidity % | |
| Maximum | Minimum | Maximum | Minimum |
| JAN - 2021 | 38.8 | 32 | 10 | 90 | 22 |
| FEB - 2021 | 29.0 | 34.4 | 9.4 | 83 | 17 |
| MAR- 2021 | 0 | 36 | 12.89 | 100 | 12 |
| APR - 2021 | 58 | 37.30 | 18.10 | 99 | 12 |
| MAY - 2021 | 48.2 | 36.60 | 18.30 | 100 | 28 |
| JUN - 2021 | 29.2 | 36.20 | 18.30 | 100 | 33 |
| JUL - 2021 | 74.3 | 33.60 | 19.00 | 100 | 40 |
| AUG - 2021 | 57.5 | 33.60 | 19.20 | 100 | 42 |
| SEP - 2021 | 48.7 | 33.90 | 18.00 | 100 | 37 |
| OCT - 2021 | 188.1 | 32.90 | 19.50 | 100 | 45 |
| NOV - 2021 | 182 | 31.20 | 18.60 | 100 | 49 |
| DEC - 2021 | 3.9 | 31.80 | 12.00 | 100 | 29 |
| TOTAL / Average | **757.7**  **(Total)** | **34.13**  **(Average)** | **16.11**  **(Average)** | **97.67**  **(Average)** | **30.50**  **(Average)** |

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Production** | **Productivity** |
| **Cattle** |  | | |
| Crossbred | 94,213 | - | - |
| Indigenous | 1,88,651 | - | - |
| Buffalo | 39,743 | - | - |
| **Total** | 3,22,607 | 1.54 lakh lt/day | 0.47 lt /day |
| Sheep | | | |
| Crossbred | - | - | - |
| Indigenous | 1,19,512 | - | - |
| Goats | 1,09,132 | - | - |
| Pigs | - | - | - |
| Crossbred | - | - | - |
| Indigenous | 1,210 | - | - |
| Rabbits | 58 | - | - |
| Poultry | 2,28,193  ( 1,54,000-Broilers & 74193 -layers) | 3,25,000 egg /annum  3,00,000 Kg Meat /annum | - |
| **Category** | **Area** | **Production** | **Productivity** |
| Fish | 8,326 ha | 2,500 MT/Annum | 0.30 MT /ha/Annum |

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

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

* 1. District profile maintained in the KVK has been **Updated** for 2021: Yes / No **Yes**

2.8 Details of Operational area / Villages

| **Sl. No.** | **Taluk** | **Name of the block** | **Name of the village** | **How long the village is covered under operational area of the KVK (specify the years)** | **Major crops & enterprises** | **Major problem identified** | **Identified Thrust Areas** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Chamarajanagara | Haradanahalli | Ankanashettypura | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables | \* Non Availability of Improved high yielding varieties  \* Local varieties are long duration (280 Days), low yielding (22.00 tons/acre), poor in quality (2.6 curcumin content).  \* Imbalanced fertilizer application  \* Not following IPDM practices | \* Introduction of Improved Variety, ICM practices, training;  \* Demonstration and trainings |
| Chamarajanagara | Haradanahalli | Braydmudlu | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables |
| Chamarajanagara | Haradanahalli | Haradanahalli | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables |
| 2 | Hanuru | Lokkanahalli | Hosapalya | 3 years | Potato, Maize, Ragi, pulses, vegetables and livestock | \* Imbalanced fertilizer application  \* Small and uneven sized tubers  \* Low yield (12 – 15 t/ha)  \* High seed rate (1250-1500 kg/acre  tubers) and cost | \* Soil test based integrated nutrient management,  \* Introduction of improved Varieties or Hybrids, IPDM  \* Evaluation of apical root cutting in potato |
| Hanuru | Lokkanahalli | Attugowdanapalya | 2 years | Potato, Maize, Ragi, pulses, vegetables and livestock |
| Hanuru | Lokkanahalli | M.G. Doddi | 2 years | Potato, Maize, Ragi, pulses, vegetables and livestock |
| 3 | Gundlupete | Therakanambi | Lakkuru | 1 years | Tree Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock | \* Low mulberry yield  \* Less rainfall  \* Depleating ground water  \* High Input cost  \* Less application of Organic  manure  \* Difficulty in waste management  (shoots)  \* Difficulty in weed management  Poor Quality and low Yield of mulberry leads to low yield and poor quality cocoons  \* Low mulberry yield due to stunted growth due to apical portion affects  \* Alternate to chemical (Nuvan) as it is being banned  \* To assess biological means of management | \* Trenching and mulching in wider spacing tree mulberry for effective waste management and also to suppress the weeds.  \* Integrated crop management practices to manage pest and diseases  \* Training and demonstration, regular advisories |
| Chamarajanagara | Harave | Badanaguppe | 2 years | Tree Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock |
| Chamarajanagara | Kasaba | Muttige | 2 years | Tree Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock |
| Chamarajanagara | Harave | Harave | 2 years | Tree Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock |
| Chamarajanagara | Harave | Nanjadevanapura | 2 years | Tree Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock |
| Gundlupete | Therakanambi | Lakkuru | 2 years | Tree Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock |
| 4 | Chamarajanagara | Santhemarahalli | Homma | 3 years | Chickpea, Maize, Pulses, Sugarcane, vegetables and livestock | \* Low yield due to use of local varieties & non-certified seeds  \* Incidence of wilt | Training and demonstration of improved high yielding disease resistance varieties  Seed treatment  Application of bio agents along with the Farm yard manure |
| Chamarajanagara | Santhemarahalli | Kotamballi | 3 years | Chickpea, Maize, Pulses, Sugarcane, vegetables and livestock |
| Chamarajanagara | Santhemarahalli | Kotamballi | 3 years | Blackgram, Chickpea, Maize, Pulses, Sugarcane, vegetables and livestock | \* Low yield due to use of local varieties sensitive to yellow mosaic virus disease and photo sensitivity.  \* No seed treatment with bio-fertilizers.  \* Not practicing application of micronutrients.  \* Indiscriminate use of plant protection chemicals | Introduction of Improved disease resistance Varieties  Demonstration of ICM practices\  Weather based application of need based plant protection chemicals |
| 5 | Gundlupete | Beguru | Taggaluru | 3 years | Sunflower, Horsegram, cotton, small onion, tomato, vegetables and livestock | \* Mid season / Terminal drought  \* Non availability of suitable high yielding varieties  \* Non adoption of line sowing and intercultural operation  \* Poor nutrient management  \* Lack of knowledge on pest and disease management | Weather forecast based crop management  Introduction of improved, short duration varieties/hybrids  Hybrid  Soil test based nutrient management  IPDM practices |
| 6 | Chamarajanagara | Haradanahalli | Bandigowdanahalli | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables | \* Non Availability of Improved high yielding varieties  \* Local varieties are long duration (280 Days), low yielding (22.00 tons/acre), poor in quality (2.6 curcumin content).  \* Alleppy supreme and Pratibha takes 235-240 days.  \* Farmers aspiring for short duration, high yielding and good quality varieties. | \* Introduction of Improved Variety, ICM practices, training;  \* Demonstration and training |
| Chamarajanagara | Haradanahalli | Venkataiahnachattra | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables |
| Chamarajanagara | Haradanahalli | Kodiugane | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables |
| Chamarajanagara | Haradanahalli | Bevinatalapura | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables |
| Chamarajanagara | Haradanahalli | Basthipura | 3 years | Turmeric, Banana, Maize, Ragi, pulses, livestock and vegetables |
| 7 | Hanuru | Lokkanahalli | Basavanagudi 85 Arabagere | 3 years | Potato, Maize, Ragi, pulses, vegetables and livestock | \* Imbalanced fertilizer application  \* Small and uneven sized tubers  \* Low yield (12 – 15 t/ha)  \* High seed rate (1250-1500 kg/acre tubers) and cost | \* Soil test based integrated nutrient management,  \* Introduction of improved Varieties or Hybrids, IPDM  \* Evaluation of apical root cutting in potato |
| Hanuru | Lokkanahalli | Byluru | 3 years | Potato, Maize, Ragi, pulses, vegetables and livestock |
| 8 | Hanuru | Lokkanahalli | Basavanagudi 85 Arabagere | 3 years | Garlic, Potato, Maize, Ragi, pulses, vegetables and livestock | \* Imbalanced fertilizers application (5 t/ha FYM, no bio-fertilizer application and 55 – 60:150:120 kg NPK/ha  \* Low yield (4 – 4.5 t/ha) | Soil test based Integrated Nutrient management |
| 9 | Gundlupete | Kasaba | Doddatuppuru | 2 years | Fodder Sorghum, Maize, Jowar, Sunflower, Horsegram, cotton, small onion, tomato, vegetables and livestock | \* Existing varieties are of single cut type and Low yielding  \* Scarcity of green fodder under rainfed condition | Introduction of multicut, high yielding varieties |
| Gundlupete | Kasaba | Bettahalli | 2 years | Fodder Sorghum, Maize, Jowar, Sunflower, Horsegram, cotton, small onion, tomato, vegetables and livestock |
| 10 | Chamarajanagara | Santhemarahalli | Kotamballi | 2 years | Maize Blackgram, Chickpea, Pulses, Sugarcane, vegetables and livestock | \* Low yield due to use of local and private varieties  \* Non application of potash and micronutrients.  \* Labour scarcity for timely weeding.  \* Lack of Knowledge on pest and disease management | Introduction of improved varieties/hybrids  Integrated nutrient management  Training and demonstration of IPDM |
| Chamarajanagara | Santhemarahalli | Homma | 2 years | Maize Blackgram, Chickpea, Pulses, Sugarcane, vegetables and livestock |
| 11 | Chamarajanagara | Kasaba | K. Mookahalli | 2 years | Livestock, Maize, Chickpea, Pulses and vegetables | \* Low yield due to use of local varieties & non-certified seeds  \* Incidence of wilt | Training and demonstration of improved high yielding disease resistance varieties  Seed treatment  Application of bio agents along with the Farm yard manure |
| Chamarajanagara | Kasaba | Hanahalli | 2 years | Livestock, Maize, Chickpea, Pulses and vegetables |
| Chamarajanagara | Kasaba | Bhogapura | 2 years | Livestock, Maize, Chickpea, Pulses and vegetables |
| 12 | Chamarajanagara | Harave | Harave | 2 years | Mulberry, sunflower, jowar, maize, Banana, tomato, vegetables and livestock | \* Low mulberry yield  \* Less rainfall  \* Depleting ground water  \* High Input cost  \* Less application of Organic manure  \* Difficulty in waste management (shoots)  \* Difficulty in weed management  Poor Quality and low Yield of mulberry leads to low yield and poor quality cocoons  \* Low mulberry yield due to stunted growth due to apical portion affects  \* Alternate to chemical (Nuvan) as it is being banned  \* To assess bilogical means of management | \* Trenching and mulching in wider spacing tree mulberry for effective waste management and also to suppress the weeds.  \* Integrated crop management practices to manage pest and diseases  Introduction of Bi - voltine worms  \* Training and demonstration, regular advisories |
| Chamarajanagara | Haradanahalli | Byadmudlu | 2 years | Mulberry, Banana, turmeric, small onion, tomato, vegetables and livestock |
| Chamarajanagara | Haradanahalli | Nanjadevanapura | 2 years | Mulberry, sunflower, jowar, maize, Banana, tomato, vegetables and livestock |
| Gundlupete | Therakanambi | Lakkuru | 2 years | Mulberry, sunflower, jowar, maize, Banana, turmeric, tomato, vegetables and livestock |
| Chamarajanagara | Kasaba | Badanaguppe | 2 years | Mulberry, Jowar, maize, Banana, tomato, vegetables and livestock |
| Chamarajanagara | Kasaba | Muthige | 2 years | Mulberry, Jowar, maize, Banana, tomato, vegetables and livestock |
| Chamarajanagara | Santhemarahalli | Yalakkuru | 2 years | Mulberry, Jowar, maize, Banana, tomato, vegetables and livestock |
| Chamarajanagara | Santhemarahalli | Yadiyuru | 2 years | Mulberry, Jowar, maize, Banana, tomato, vegetables and livestock |
| Yalanduru | Kasaba | Gangavadi | 2 years | Mulberry, Jowar, maize, Banana, tomato, vegetables and livestock |
| Chamarajanagara | Haradanahalli | Bandigowdanahalli | 2 years | Mulberry, Jowar, maize, Banana, Turmeric tomato, vegetables and livestock |
| Chamarajanagara | Haradanahalli | Byadmudlu | 2 years | Mulberry, Jowar, maize, Banana, Turmeric tomato, vegetables and livestock |
| 13 | Chamarajanagara | Kasaba | Muthige | 2 years | Silkworm, Mulberry, Jowar, maize, Banana, tomato, vegetables and livestock | Lack of awareness on Improved hybrids,  Low yield and poor quality of leaves  Not practicing ICM | \* Trenching and mulching in wider spacing tree mulberry for effective waste management and also to suppress the weeds.  \* Integrated crop management practices to manage pest and diseases  Introduction of Bi - voltine worms  \* Introduction of ICM practices  Hybrid & Nutrient management |
| Chamarajanagara | Haradanahalli | Byadmudlu | 2 years | Silkworm, Mulberry, Jowar, maize, Banana, Turmeric tomato, vegetables and livestock |
| Gundlupete | Therakanambi | Lakkuru | 2 years | Silkworm, Mulberry, sunflower, jowar, maize, Banana, turmeric, tomato, vegetables and livestock |
| Chamarajanagara | Haradanahalli | Bandigowdanahalli | 2 years | Silkworm, Mulberry, Jowar, maize, Banana, Turmeric tomato, vegetables and livestock |
| Chamarajanagara | Santhemarahalli | Yadiyuru | 2 years | Silkworm, Mulberry, Jowar, maize, Banana, Turmeric tomato, vegetables and livestock |
| 14 | Gundlupete | Kasaba | Doddatuppuru | 2 years | Small Onion, Sunflower, Jowar, maize, Horsegram Banana, Turmeric tomato, vegetables and livestock | \* Use of Bulbs (500kg/acre) for planting– COSTS > 50% COC  \* Imbalanced crop nutrition–  -Under dose application of organic manures (hardly 5 – 6 t/ha).  -Not following application of bio-fertilizers.  -Not using sulphur based fertilizers (> 75 % soils deficient in sulphur).  -Improper fertilizer scheduling. | Introduction of seed (seedlings raise in the nursery) onion instead of the bulbs  Training on soil test based integrated nutrient management |
| Gundlupete | Kasaba | Bettadamadahalli | 2 years | Small Onion, Sunflower, Jowar, maize, Horsegram Banana, Turmeric tomato, vegetables and livestock |
| Gundlupete | Kasaba | Dadadahalli | 2 years | Small Onion, Sunflower, Jowar, maize, Horsegram Banana, Turmeric tomato, vegetables and livestock |
| Gundlupete | Hangala | Puttanapura | 2 years | Small Onion, Sunflower, Jowar, maize, Horsegram Banana, Turmeric tomato, vegetables and livestock |
| Chamarajanagara | Haradanahalli | Byadmudlu | 2 years | Small Onion, Mulberry, Jowar, maize, Banana, Turmeric tomato, vegetables and livestock |
| 15 | Yalandur | Kasaba | Y.K. Mole | 2 years | Ragi, paddy, Sugarcane, Banana, coconut, vegetables and livestock | \* Lack of availability of short duration high yielding varieties.  \* Susceptible to Blast disease.  \* Poor nutrient management  \* Lack of knowledge on pest and disease management | Introduction of Improved short duration high yielding varieties  Training and demonstration of ICM practices in paddy |
| Gundlupete | Beguru | Somahalli | 2 years | Silkworm, Small Onion, Jowar, maize,pulses, Banana, Turmeric tomato, vegetables and livestock | Low cocoon yield, More Consumption of leaves & Larval duration | \* Trenching and mulching in wider spacing tree mulberry for effective waste management and also to suppress the weeds.  \* Integrated crop management practices to manage pest and diseases  Introduction of Bi - voltine worms |
| Gundlupete | Beguru | Horeyala | 2 years | Silkworm, Small Onion, Jowar, maize, pulses, Banana, Turmeric tomato, vegetables and livestock |
| Gundlupete | Beguru | Doddahundi | 2 years | Silkworm, Small Onion, Jowar, maize, pulses, Banana, Turmeric tomato, vegetables and livestock |
| Gundlupete | Kasaba | Bendagahalli | 2 years | Silkworm, Small Onion, Jowar, maize, pulses, Banana, Turmeric tomato, vegetables and livestock |

2.9 Priority thrust areas

|  |  |
| --- | --- |
| **S. No** | **Thrust area** |
| 1 | Adoption of High yielding varieties / hybrids |
| 2 | Integrated crop management |
| 3 | Non availability of short duration and drought tolerant varieties, Hybrids |
| 4 | Suitable cropping system |
| 5 | Integrated nutrient management |
| 6 | Integrated pest and disease management |
| 7 | Improved Fodder cultivation |
| 8 | Cropping System and resource management |
| 9 | Health & nutrition security |
| 10 | On-farm Resource Management |
| 11 | Adoption of Bio-fertilizer |

**PART III - TECHNICAL ACHIEVEMENTS**

**3.A. Target and Achievements of mandatory activities**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **OFT** | | | | **FLD** | | | |
| **1** | | | | **2** | | | |
| **OFTs (No.)** | | **Farmers (No.)** | | **FLDs (No.)** | | **Farmers (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 08 | 08 | 23 | 23 | 18 | 18 | 200 | 200 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Farmers/farm women)** | | | | **Training (Rural youth)** | | | |
| **3** | | | | **4** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 50 | 52 | 1200 | 1492 | 05 | 03 | 60 | 60 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Extension personnel)** | | | | **Training (sponsored)** | | | |
| **5** | | | | **6** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 02 | 02 | 60 | 60 | 03 | 03 | 100 | 152 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Vocational)** | | | | **Extension Programmes** | | | |
| **7** | | | | **8** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 05 | 06 | 100 | 120 | 500 | 563 | 20000 | 20457 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed Production (Q)** | | **Planting material (Nos.)** | |
| **9** | | **10** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 25 | 31.125 | 20,000 | 23,887 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Livestock, poultry strains and fingerlings (No.)** | | **Bio-products (Kg)** | |
| **11** | | **12** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 10 nos. | 10 nos. | 10,000 | 10,168 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Soil, water, plant and manure analysis**  **(including mobile kits)** | | | | **Mobile agro advisories provided** | | | |
| **13** | | | | **14** | | | |
| **Samples (No.)** | | **Farmers (No.)** | | **Messages including text, voice (No.)** | | **Farmers (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 700 | 543 | 500 | 400 | 50 | 11 | 40,000 | 37,534 |

**3.B1. Abstract of interventions undertaken**

| **S. No** | **Thrust**  **area** | **Crop/**  **Enterprise** | **Identified Problem** | **Interventions** | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Title of OFT**  **if any** | **Title of FLD if any** | **Number of Training (farmers)** | **Number of Training (Youths)** | **Number of Training (extension personnel)** | **Extension activities**  **(No.)** | **Supply of**  **seeds (Qtl.) / demo** | **Supply of planting materials (No.) / demo** | **Supply of livestock (No.) / demo** | **Supply of bio products / demo** | |
| **1** | Hybrid | Fodder | * Low yield due to use of old varieties * Less palatability & Nutritionally low quality fodder | Assessing the performance of Hybrid Napier varieties under Chamarajanagara District | **-** | **01** | **-** | **-** | **02** | - | CO-3: 400 nos.  BNH-10: 400 nos.  PBN- 342: 400 nos.  Super Napier: 400 nos. | **-** | **No.** | **Kg** |
| 2 | INM | Potato | * Imbalanced fertilizers application * Small and uneven sized tubers * Low yield (12 – 13 t/ha) | Assessment of nutrient management in Potato | - | 01 | - | - | 03 | - | - | - | - | - |
| 3 | INM | Maize | * Excess nitrogenous fertilizer application - increased insect & diseases (borerdamage and blight disease - 35 to 40%) * Imbalanced fertilizer nutrient aplication (61.6:46:30 kg N:P:K per acre) * Not aware of nanofertilizer | Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize | - | 01 | - | - | 02 | - | - | - | - | - |
| 4 | Improved variety and ICM | Turmeric | * Local varieties are long duration (280 Days), low yielding (22.00 tons/acre), poor in quality (2.6 curcumin content). * Farmers are aspiring for short duration, high yielding and good quality varieties. * Non Availability of short duration, quality seed rhizomes, high yielding varieties locally. * Alleppy supreme and Pratibha takes 240-242 days. | Assessment of suitable short duration Turmeric varieties for higher yield and quality | Popularization short duration improved Turmeric variety IISR Pragathi | 06 | - | - | 16 | * Pragathi   (2 q)   * Rajendra   Sonia (2 q)   * Peetambari   (2 q) | - | - |  |  |
| 5 | Propagation methods and ICM | Potato | * Farmers are depending on unknown source for seed tubers requirement. * Low quality seed tubers availability. * Need to assess self sustain technology for potato seed tuber production locally. * Involvement of middlemen in seed tuber supply. * Non availability of quality seed tubers of particular variety | Assessment of different propagation methods in potato | - | 01 | - | - | 02 | Seed tubers of  Kufri jyothi (2 q) | * ARC cv. Kufri jyothi saplings (15,000 no.) * ARC cv. Kufri Himalini saplings (15,000 no.) | - | - | - |
| 6 | IPDM | Banana | * *Fusarium wilt : Fusarium oxysporum* f.sp.cubense * *Nematode: Meloidogyne incognita and Radophilus similus* * Micronutrient deficit and Lower use of organic manure * Yield loss : 20 -30 % depend upon environment condition. | Assessment of technologies for the management of Panama wilt disease in Banana | - | 01 | - | - | 02 | - | - | - | - | Trichoderma harzianum (0.21 q)  Pseudomonas fluroscens (0.21 q)  Microbial consortia (0.48 q) |
| 7 | Resource conservation and In suit manuring | Mulberry | * Low mulberry yield * High Input cost * Less application of Organic manure * Difficulty in Rearing waste management (shoots) * Low mulberry yield due to stunted growth due to apical portion affects * Alternate to chemical (Nuvan) as it is being banned * To assess bilogical means of management | Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry | - | 01 | - | - | 02 | - | - | - | Waste Decomposer  (50 nos.) | Compost Culture  (0.25 q) |
| 8 | IPM | Mulberry | * High incidence of sucking pests in mulberry in recent times * Low leaf yield | Assessment on Management of Mites and Thrips in Mulberry | - | 01 | - | - | 02 | - | - | - | - | Bio-agents (1000 eggs/a) |
| 9 | Improved variety and ICM | Blackgram | * Low yield due to use of local varieties sensitive to yellow mosaic virus disease and photo sensitivity. * No seed treatment with bio-fertilizers. * Not practicing application of micronurients. * Indiscriminate use of plant protection chemicals |  | Demonstration of Blackgram variety LBG-791 | 03 | - | 01 | 07 | ` Blackgram variety LBG-791 (10 kg) | - | - | - | Rhizobium  (200 g)  PSB  (200 g) |
| 10 | Improved variety and ICM | Ragi | * Lack of availability of short duration high yielding varieties. * Susceptible to Blast disease. * Poor nutrient management * Lack of knowledge on pest and disease management |  | Demonstration of Ragi variety KMR-630 | 04 | - | - | 05 | KMR-630: 0.0025 q/a | - | - | - | Azospirillum (0.002 q)  PSB: (0.002g**)** |
| 11 | Improved variety and ICM | Redgram | * Low yield due to use of local varieties susceptible to wilt * No seed treatment with bio-fertilizers. * Nipping not practiced. * Not practicing application of micronurients. * Indiscriminate use of plant protection chemicals |  | Demonstration of Redgram variety BRG-3 | 05 | - | - | 07 | BRG-3: 0.05 q | - | - | - | Rhizobium  0.002 q  PSB:  0.002 q  Trichoderma  0.002 q |
| 12 | Improved variety and ICM | Chickpea | * Low yield due to use of local varieties susceptible to wilt * No seed treatment with bio-fertilizers. * Nipping not practiced. * Not practicing application of micronurients. * Indiscriminate use of plant protection chemicals |  | Demonstration of Chickpea variety BGD-103 | 04 | - | 01 | 09 | BGD-103 : 0.20 q | - | - | - | Rhizobium  0.002 q  PSB:  0.002 q  Trichoderma  0.002 q |
| 13 | Cost and Drudgery reduction | Rice | * Water scarcity in Kabini tail end area for in time nursery preparation and transplanting * Labour problem for timely transplanting of paddy * Labour scarcity for timely weeding * Lack of knowledge on Micronutrients application |  | Demonstration of Drum Seeded Rice | 02 | - | - | 04 | KMP - 220: 0.2q | - | - | - | Rhizobium  0.002 q  PSB:  0.002 q |
| 14 | INM | Ragi | * low yield (8 to 10 q/acre and yield gap is 2 to 8 q/acre) * FYM – Less / no application * Imbalanced fertilizer nutrient aplication (29.1:8.5:8.5 to 30 - 35:9.2:9 kg N:P:K per acre against recommendation of 40:20:20 kg N:P:K per acre) * No application of biofertilizers and micronutrients (zinc and boron) |  | STCR based nutrient management in irrigated Ragi | 01 | - | - | 05 | MR-6: 0.02 q | - | - | - | Azospirillum (0.004 q/ha) |
| 15 | Resource conservation and In suit manuring | Sugarcane | * Burning of sugarcane trash after harvest * loss of organic matter and impairment of soil biological properties |  | Sugarcane trash management | 01 | - | - | 09 | - | - | - | - | Pleurotus (0.004 q) |
| 16 | ICM | Watermelon | * Imbalanced fertilizer application (80 - 85:70:40 kg NPK/ha) * Flower drop, fruit cracking, mis-shape fruits , low fruit set * Incidence of thrips, fruit fly, leaf minor, *Fusarium* wilt (>60% loss) * low yield |  | Integrated Crop Management in Watermelon | 02 | - | - | 06 | - | - | - | - | Trichoder*ma*  (0.02 q)  *Paeciliomyces (0.02 q)* |
| 17 | Hybrid and ICM | Tomato | * Severe pest and disease incidence, indiscriminate use of PP chemicals |  | Integrated Crop Management in Tomato | 02 | - | - | 06 | Arka Abhed (0.0003q) | - | - | - | *Trichoderma, Pseudomonas, Paeciliomyces*, *Metarhizium each 0.02 q* |
| 18 | IPDM & INM | Small onion | * Infestation of Thrips, Incedence of Purple blotch, Anthracnose, *Fusarium* wilt, Nematode and Micro nutrient deficiency ( Boron , Zinc, Ferrous ) results in reduction in yield (20-43.8%). |  | Integrated management of Pest and Diseases in Small onion | 02 | - | - | 06 | - | - | - | - | *Trichoderma hazianum 0.08 q*  *Pseudomonas, Paecliomyces*  0.01 q /each  *Verticilium lecanii 0.02 q* |
| 19 | ICM | Cabbage | * DBM (>42%) infestation, Black rot, indiscriminate use of pesticide. |  | Integrated Crop Management in Cabbage | 02 | - | - | 06 | Mustard seeds  0.05 q | - | - | - | *Beauveria bassiana(1 ltrs)*  *Metarhizium anisopliae*  (1 ltr)  *Verticillium leccani( 1ltr)* |
| 20 | IPDM | Banana | * Sigatoka leaf spot, Panama wilt and Nematode results Lower yield and Quality (Loss due to diseases: 30-40% ) |  | Integrated Disease Management in Banana ( Yelakki) | 01 | - | - | 04 | Marigold seeds 0.001 q | - | - | - | *Trichoderma hazianum and Pseudomonas fluroscen, Paecliomyces lilacinus*  Each 0.06 q |
| 21 | Improved variety and ICM | Field bean | * Low yield due to use of local varieties. * No seed treatment with bio-fertilizers. * Not practicing application of micronurients. * Indiscriminate use of plant protection chemicals |  | Integrated crop management in Field bean | 01 | - | - | 03 | HA-3 0.1 q | - | - | - | rhizobium and PSB (0.005 q each/ha) |
| 22 | IPM | Mulberry | * Low mulberry yield due to stunted growth due to apical portion affects * Alternate to chemical (Nuvan) as it is being banned * To assess bilogical means of management |  | Demonstration of IPM practices for management of leaf roller in Mulberry | 02 | - | - | 09 | - | - | - | - | Trichogramma chilonis cards (80 nos.)  Braconids  (!250 nos.) |
| 23 | Hybrid | Cocoon | * Lack of Production of quality and desired quantity of seed cocoons. |  | Promoting / Up scaling to Seed cocoon producers (silkworm single hybrids) FC-1 and FC-2 | 02 | - | - | 05 | - | - | - | - | - |
| 24 | Hybrid | Silkworm | * Lack of awareness on Improved hybrids, * Low yield and poor quality |  | Scaling up of improved silkworm hybrid FC-1 X FC-2 | 02 | - | - | 06 | - | - | - | - | - |
| 25 | Nutrient management | Cocoon | * Low yield and quality cocoon production |  | Demonstration on Samruddhi (JHA Technology) for enhanced cocoon / silk production | 02 | - | - | 03 | - | - | - | - | - |

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No** | **Title of Technology** | **Source of technology** | **Crop/enterprise** | **No.ofprogrammes conducted** | | | |
| **OFT** | **FLD** | **Training** | **Others (Specify)** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| **1** | Assessing the performance of Hybrid Napier varieties under Chamarajanagara District | UAS B;  PAU, Ludhiana & TNAU, Coimbatore | Hybrid Napier | 01 | - | 01 | Field visit and Method demonstration |
| **2** | Assessment of nutrient management in Potato | UAS (B), TNAU, Coimbatore & CPRI, Shimla | **Potato** | **01** |  | **01** | Field visit and Method demonstration |
| **3** | Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize | UAS Bangalore & IFFCO-NBRC Gujarat | **Maize** | **01** |  | **01** | Field visit and Method demonstration |
| **4** | Assessment of suitable short duration Turmeric varieties for higher yield and quality | IISR Kerala, RP CAU, Bihar & CIMAP Lucknow | **Turmeric** | **01** |  | **06** | Field visit and Method demonstration |
| **5** | Assessment of different propagation methods in potato | UAS B & UHS B | **Potato** | **01** |  | **01** | Field visit and Method demonstration |
| **6** | Assessment of technologies for the management of Panama wilt disease in Banana | UAHS, NRC , Tiruchirapalli  Tamil Nadu & CSSRI, Karnal, Haryana | **Banana** | **01** |  | **01** | Field visit and Method demonstration |
| **7** | Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry | UAS B & NCOF, NewDelhi | **Mulberry** | **01** |  | **01** | Field visit and Method demonstration |
| **8** | Assessment on Management of Mites and Thrips in Mulberry | UAS Bengaluru, CSRTI, Mysuru, NBAIR, Bengaluru & CSRTI, Mysuru | **Mulberry** | **01** |  | **01** | Field visit and Method demonstration |
| **9** | Demonstration of Blackgram variety LBG-791 | UAS (B) | **Blackgram** |  | **01** | **03** | Field visit and Method demonstration, Field day |
| **10** | Demonstration of Ragi variety KMR-630 | UAS (B) | **Ragi** |  | **01** | **04** | Field visit and Method demonstration, Field day |
| **11** | Demonstration of Redgram variety BRG-3 | UAS (B) | **Redgram** |  | **01** | **05** | Field visit and Method demonstration, Field day |
| **12** | Demonstration of Chickpea variety BGD-103 | UAS (D) | **Chickpea** |  | **01** | **04** | Field visit and Method demonstration, Field day |
| **13** | Demonstration of Drum Seeded Rice | UAS (B) | **Rice** |  | **01** | **02** | Field visit and Method demonstration, Field day |
| **14** | STCR based nutrient management in irrigated Ragi | UAS (B) | **Ragi** |  | **01** | **01** | Field visit and Method demonstration, Field day |
| **15** | Sugarcane trash management | UAS (B) | **Sugarcane** |  | **01** | **01** | Field visit and Method demonstration, Field day |
| **16** | Integrated Crop Management in Watermelon | IIHR,Bengaluru and TNAU Coimbatore | **Watermelon** |  | **01** | **02** | Field visit and Method demonstration, Field day |
| **17** | Popularization short duration improved Turmeric variety IISR Pragathi | IISR Kerala | **Turmeric** |  | **01** | **01** | Field visit and Method demonstration, Field day |
| **18** | Integrated Crop Management in Tomato | UHS, Bagalkot & IIHR, Bengaluru | **Tomato** |  | **01** | **02** | Field visit and Method demonstration, Field day |
| **19** | Integrated management of Pest and Diseases in Small onion | NRC for Onion and Garlic , Pune & IIHR, Bengaluru | **Small Onion** |  | **01** | **02** | Field visit and Method demonstration, Field day |
| **20** | Integrated Crop Management in Cabbage | IIHR, Bengaluru | **Cabbage** |  | **01** | **02** | Field visit and Method demonstration, Field day |
| **21** | Integrated Disease Management in Banana (Yelakki) | UHSB | **Banana** |  | **01** | **01** | Field visit and Method demonstration |
| **22** | Integrated crop management in Field bean | UAS (B) | **Field bean** |  | **01** | **01** | Field visit and Method demonstration |
| **23** | Demonstration of IPM practices for management of leaf roller in Mulberry | **-** | **Mulberry** |  | **01** | **02** | Field visit and Method demonstration |
| **24** | Promoting / Up scaling to Seed cocoon producers (silkworm single hybrids) FC-1 and FC-2 | **-** | **Soilkwoem** |  | **01** | **02** | Field visit and Method demonstration |
| **25** | Scaling up of improved silkworm hybrid FC-1 X FC-2 | CSRTI, Mysore | **Silkworm** |  | **01** | **02** | Field visit and Method demonstration |
| **26** | Demonstration on Samruddhi (JHA Technology) for enhanced cocoon / silk production | CSRTI, Mysuru | **Cocoon** |  | **01** | **02** | Field visit and Method demonstration |

**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 |
| **24** | **1** | **2** | **0** | **160** | **10** | **23** | **37** | **1140** | **486** | **503** | **441** | **11270** | **1351** | **4585** | **761** |

**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 | 01 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 02 |
| Varietal Evaluation | 01 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 02 |
| Integrated Pest Management | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 01 |
| Integrated Crop Management | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Integrated Disease Management | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 01 |
| Small Scale Income Generation Enterprises | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Weed Management | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Resource Conservation Technology | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Farm Machineries | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Integrated Farming System | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Seed / Plant production | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Value addition | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Drudgery Reduction | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Storage Technique | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Cropping Systems | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 01 |
| Farm Mechanization | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Mushroom cultivation | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Others (Different propagation method) | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 |
| **Total** | **02** | **00** | **00** | **00** | **00** | **00** | **00** | **04** | **02** | **08** |

**4.A2. Abstract on the number of technologies refined in respect of crops N I L**

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

**4.A3. Abstract on the number of technologies assessed in respect of livestock N I L**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Cattle** | **Poultry** | **Piggery** | **Rabbit** | **Fisheries** | **TOTAL** |
| Evaluation of Breeds |  |  |  |  |  |  |
| Nutrition Management |  |  |  |  |  |  |
| Disease of Management |  |  |  |  |  |  |
| Value Addition |  |  |  |  |  |  |
| Production and Management |  |  |  |  |  |  |
| Feed and Fodder |  |  |  |  |  |  |
| Small Scale income generating enterprises |  |  |  |  |  |  |
| Dairy |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |

**4.A4. Abstract on the number of technologies refined in respect of livestock N I L**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Cattle** | **Poultry** | **Piggery** | **Rabbit** | **Fisheries** | **TOTAL** |
| Evaluation of Breeds |  |  |  |  |  |  |
| Nutrition Management |  |  |  |  |  |  |
| Disease of Management |  |  |  |  |  |  |
| Value Addition |  |  |  |  |  |  |
| Production and Management |  |  |  |  |  |  |
| Feed and Fodder |  |  |  |  |  |  |
| Small Scale income generating enterprises |  |  |  |  |  |  |
| Dairy |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technologies** | **No. of trials** | **Number of farmers / locations** | **Area in ha (Per trial covering all Technological Options in a farm)** |
| Integrated Nutrient Management | Maize | Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize | 05 | 05 | 0.4 |
| Potato | Assessment of nutrient management in Potato | 03 | 03 | 0.4 |
| Varietal Evaluation | Hybrid  Napier | Assessing the performance of Hybrid Napier varieties under Chamarajanagara District | 03 | 03 | 0.08 |
| Turmeric | Assessment of suitable short duration Turmeric varieties for higher yield and quality | 02 | 02 | 0.2 |
| Integrated Pest Management | Mulberry | Assessment on Management of Mites and Thrips in Mulberry | 03 | 03 | 0.4 |
|  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Disease Management | Banana | Assessment of technologies for the management of Panama wilt disease in Banana | 02 | 02 | 0.6 |
|  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |
|  |  |  |  |  |
| Weed Management |  |  |  |  |  |
|  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  |  |
|  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |
|  |  |  |  |  |
| Seed / Plant production | Potato | Assessment of different propagation methods in potato | 02 | 02 | 0.2 |
|  |  |  |  |  |
| Value addition |  |  |  |  |  |
|  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |
|  |  |  |  |  |
| Storage Technique |  |  |  |  |  |
|  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |
|  |  |  |  |  |
| Cropping system | Mulberry | Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry | 03 | 03 | 0.4 |
| **Total** | **08** |  | **23** | **23** | **2.68** |

**4.B.2. Technologies Refined under various Crops N I L**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technologies** | **No. of trials** | **Number of farmers/locations** | **Area in ha (Per trial covering all Technological Options in a farm)** |
| Integrated Nutrient Management |  |  |  |  |  |
|  |  |  |  |  |
| Varietal Evaluation |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Pest Management |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Disease Management |  |  |  |  |  |
|  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |
|  |  |  |  |  |
| Weed Management |  |  |  |  |  |
|  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  |  |
|  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |
|  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |
|  |  |  |  |  |
| Post Harvest Technology/Value addition |  |  |  |  |  |
|  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |
|  |  |  |  |  |
| Storage Technique |  |  |  |  |  |
|  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |
|  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |
| Farm Mechanization |  |  |  |  |  |
| Others, Pl specify |  |  |  |  |  |
| **Total** |  |  |  |  |  |

**4.B.3. Technologies assessed under Livestock N I L**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Thematic areas** | **Name of the livestock** | **Name of the technologies** | **No. of trials** | **No. of farmers/locations** |
| Evaluation of breeds |  |  |  |  |
| Nutrition management |  |  |  |  |
| Disease management |  |  |  |  |
| Processing and Value addition |  |  |  |  |
| Production and management |  |  |  |  |
| Feed and fodder management |  |  |  |  |
| Small scale income generating enterprises |  |  |  |  |
| Others, pl. specify |  |  |  |  |
| **Total** | | |  |  |

**4.B.4. Technologies Refined under Livestock and other enterprises N I L**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Thematic areas** | **Name of the livestock** | **Name of the technologies** | **No. of trials** | **No. of farmers/locations** |
| Evaluation of breeds |  |  |  |  |
| Nutrition management |  |  |  |  |
| Disease management |  |  |  |  |
| Processing and Value addition |  |  |  |  |
| Production and management |  |  |  |  |
| Feed and fodder management |  |  |  |  |
| Small scale income generating enterprises |  |  |  |  |
| Others, pl. specify |  |  |  |  |
| **Total** |  |  |  |  |

4.B.5. T**echnologies assessed under various enterprises by KVKs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. | **Thematic areas** | **Name of the enterprise** | **Name of technology(s)** | **No. of trials** | **No. of locations** |
| 1 | Drudgery reduction |  |  |  |  |
| 2 | Entrepreneurship Development |  |  |  |  |
| 3 | Health and nutrition |  |  |  |  |
| 4 | Processing and value addition |  |  |  |  |
| 5 | Energy conservation |  |  |  |  |
| 6 | Small-scale income generation |  |  |  |  |
| 7 | Storage techniques |  |  |  |  |
| 8 | Household food security |  |  |  |  |
| 9 | Organic farming |  |  |  |  |
| 10 | Agroforestry management |  |  |  |  |
| 11 | Mechanization |  |  |  |  |
| 12 | Resource conservation technology |  |  |  |  |
| 13 | Value Addition |  |  |  |  |
| 14 | Others, pl. specify |  |  |  |  |

4.B.6. T**echnologies assessed under various enterprises for women empowerment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Thematic areas** | **Name of enterprise** | **Name of technology(s)** | **No. of trials** | **No. of locations** |
| 1 | Drudgery Reduction |  |  |  |  |
| 2 | Entrepreneurship Development |  |  |  |  |
| 3 | Health and Nutrition |  |  |  |  |
| 4 | Value Addition |  |  |  |  |
| 5 | Women Empowerment |  |  |  |  |
| 6 | Others, pl. specify |  |  |  |  |
|  |  |  |  |  |  |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of  trials | Technology Assessed | Source of technology | Yield | Unit of yield | Observations other than yield | Gross Return Rs. / unit | Net Return Rs. / unit | BC Ratio (Gross income/ Gross Cost) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Hybrid napier | Rainfed | * Low yield due to use of old varieties * Less palatability & Nutritionally low quality fodder | Assessing the performance of Hybrid Napier varieties under Chamarajanagara District | 03 | T.O.1: CO-3 | Farmers Practice | 147.2 | t/ha | No. of tillers: 32.1 | - | - | - |
| T.O.2: BHN-10 | UAS B | 155.9 | t/ha | No. of tillers:  42.2 | - | - | - |
| T.O.3: PBN-342 | PAU, Ludhiana | 176.5 | t/ha | No. of tillers:  41.4 | - | - | - |
| T.O.4: CO-5 | TNAU, Coimbatore | 166.6 | t/ha | No. of tillers:  34.1 | - | - | - |
| Potato | Irrigated | * Imbalanced fertilizers application * Small and uneven sized tubers * Low yield (12 – 13 t/ha) | Assessment of nutrient management in Potato | 03 | T.O.1: 5 tonnes/ha FYM 10 days before planting, 187.5 kg/ha DAP while planting and 187.5 kg/ha 10:26:26 4 weeks after planting (52.5:135:48.75 kg NPK/ha) | Farmers practice | 15.1 | t/ha | Weight of Tubers/hill (g): 457.5 | 276330 | 161182 | 2.4 |
| T.O.2: FYM@ 25 t/ha, 2 kg Azospirillum, 2 kg Phosphate solublising bacteria, Soil test based nutrient application  (RDF – 125:100:125 kg/ha), 50% N, 100% P&K as basal dose at the time of planting, 50% N at 4 weeks after planting | UAS (B) | 16.7 | t/ha | Weight of Tubers/hill (g): 508.7 | 305610 | 178272 | 2.4 |
| T.O.3: FYM@ 15 t/ha, 2 kg Azospirillum, 2 kg Phosphobacterium , NPK-120:240:120 kg/ha and 60 kg/ha MgSO4, 50% NPK and 100 % MgSO4 at the time of planting, 50% NPK 30 days after planting | TNAU, Coimbatore | 19.4 | t/ha | Weight of Tubers/hill (g): 582.6 | 355020 | 232599 | 2.9 |
| FYM@ 15 t/ha, NPK-140:60:60 kg/ha, Ca – 8 kg/ha and Sulphur 30 kg/ha, 2/3rd N, 100% P&K at the time of planting, 1/3rd of N at 25 days after planting | CPRI, Shimla | 18.0 | t/ha | Weight of Tubers/hill (g): 601.0 | 392400 | 223142 | 3.1 |
| Maize | Rainfed | * Excess nitrogenous fertilizer application - increased insect & diseases (borerdamage and blight disease - 35 to 40%) * Imbalanced fertilizer nutrient aplication (61.6:46:30 kg N:P:K per acre) * Not aware of nanofertilizer | Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize | 05 | T.O.1: DAP , Urea and Setright each 1 bag mixed and applied per acre during sowing.  30 to 35 DAS DAP , Ammonium Sulphate and MOP each 1 bag mixed and applied per acre (total N:P:K = 60:40:30 Kg). | Farmers' Practice | 55.3 | q/ha | Plant height (60 DAS): 121.50 cm | 91245 ₹/ha. | 45295  ₹/ha. | 1.99 |
| T.O.2: Soil test based nutrient management (RDF: 40:20:10 Kg NPK/acre). 50% N , full P& K as basal, remaining 50 % N topdressing at 3 to 4 weeks after sowing. | UAS Bangalore | 58.8 | q/ha | Plant height (60 DAS): 129.0 cm | 97020 ₹/ha. | 49145 ₹/ha. | 2.03 |
| T.O.3: Application of 50% N , full P & K as basal, Nano Nitrogenous fertilizer foliar application at 30DAS (4 ml/l) & 20 days after first spray. | IFFCO-NBRC Gujarath | 63.0 | q/ha | Plant height (60 DAS): 138.20 cm | 103950 ₹/ha. | 54825 ₹/ha. | 2.20 |
| Turmeric | Irrigated | * Local varieties are long duration (280 Days), low yielding (22.00 tons/acre), * poor in quality (2.6 curcumin content). * Farmers are aspiring for short duration, high yielding and good quality varieties. * Non Availability of short duration, high yielding varieties locally. * Alleppy supreme and Pratibha takes 240-242 days. | Assessment of suitable short duration Turmeric varieties for higher yield and quality | 03 | T.O.1: Local | Farmers' Practice | Fresh rhizome:  25.97 t/ha | t/ha | Cured Rhizome: 4.69  Duration:  276 days | 351750 ₹/ha. | 177521.66  ₹/unit. | 2.01 |
| T.O.2: IISR Pragathi | IISR Kerala | Fresh rhizome:  40.19 | t/ha | Cured Rhizome:  8.07  Duration:  190 | 605250 ₹/ha. | 476370 ₹/unit. | 3.23 |
| T.O.3: Rajendra sonia | RP CAU, Bihar | Fresh rhizome:  38.01 | t/ha | Cured Rhizome:  7.31  Duration:  188 | 548250 ₹/ha. | 359133.3  ₹/unit. | 2.89 |
| T.O.4: Pitambari | CIMAP Lucknow | Fresh rhizome:  46.73 | t/ha | Cured Rhizome:  10.11  Duration:  182 | 758250  ₹/ha. | 544158.3 ₹/unit. | 3.89 |
| Potato | Irrigated | * Farmers are depending on unknown source for seed tubers requirement. * Low quality seed tubers availability. * Need to assess self sustain technology for potato seed tuber production locally. * Involvement of middlemen in seed tuber supply. * *Non availability of quality seed tubers of particular variety* | Assessment of different propagation methods in potato | 03 | T.O.1: Farmer practice | Farmers practices | 12.75 | t/ha | No. of Tubers/plant:  4.33  No. of Tuber yield/plant:  147.2 | Nos,  g | 135840 | 1.62 |
| T.O.2: Recommended practice | UAS B | 18.21 | t/ha | No. of Tubers/plant:  5.33  No. of Tuber yield/plant:  279.7 | Nos,  g | 291306.7 | 2.29 |
| T.O.3: TO3: Apical rooted cuttings of cv. Kufri jyothi | 16.37 | t/ha | No. of Tubers/plant:  4.33  No. of Tuber yield/plant:  210 | Nos,  g | 261866.7 | 1.80 |
| T.O.4: Apical rooted cuttings of cv. Kufri Himalini | 20.25 | t/ha | No. of Tubers/plant:  7.33  No. of Tuber yield/plant:  342.5 | Nos,  g | 323946.7 | 2.17 |
| Banana | Irrigated | *Fusarium wilt : Fusarium oxysporum* f.sp.cubense  *Nematode : Meloidogyne incognita and Radophilus similus*  Micronutrient deficit and Lower use of organic manure  Yield loss : 20 -30 % depend upon environment condition. | Assessment of technologies for the management of Panama wilt disease in Banana | 03 | T.O.1: Farmers practice | Farmers practice | Crop is at critical growth stage | | | | | |
| T.O.2: Dipping of Rhizome in carbendazim (0.1%) for 30 minutes  Pit application of *Trichoderma harzianum 25 gm Pseudomonas* 25 gm + 500 gm of Neem cake along with FYM and repeated application of bioagents 2nd, 4th and 6th month after planting | UAHS |
| T.O.3: Use of disease free suckers + dipping in carbendazim (0.2%) for 30 minutes +Application of Neem cake @ 250 gm per plant + Drenching with 0.2 % solution @ 2nd month, 4th month and 6th month after planting. | NRC , Tiruchirapalli, Tamil Nadu | Crop is at critical growth stage | | | | | |
| T.O.4: Use of ICAR FUSICONT (Microbial consortia ) –  Basal application(500ml per plant) and deep placement during  2-3 months (500ml per plant) , 5th(1000ml per plant)  7th month(1000ml per plant) and 9th month(1000ml per plant)  ( Mix with 6 kg ICAR FUSICONT in 200 litre of water add 200 gm  of jaggery keep it for 48 hours and ready for application) | CSSRI, Karnal, Haryana | Crop is at critical growth stage | | | | | |
| Mulberry | Irrigated | * *Low mulberry yield* * *High Input cost* * *Less application of Organic manure* * *Difficulty in Rearing waste management (shoots)* | Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry | 06 | T.O.1: Mulberry garden without Trenching & Mulching (T&M) | Farmer practice | 46000 | kg/ha |  | 2,30,000 | 180000 | 1.27 |
| T.O.2: Mulberry with T & M + Compost culture (1 kg/t of rearing waste) | UAS B | 56025 | kg/ha |  | 280125 | 174000 | 1.61 |
| T.O.3: Mulberry with T & M + Waste Decomposer | NCOF, NewDelhi | 57000 | kg/ha |  | 285000 | 172500 | 1.66 |
| Mulberry | Irrigated | * High incidence of sucking pests in mulberry in recent times * Low leaf yield | Assessment on Management of Mites and Thrips in Mulberry | 03 | T.O.1: Spraying of Dichlorvos (0.2%), Dimethoate 30 EC (0.2%), Neem soap (10gm/L) at 12-15 DAP | Farmer practice | 46500 | kg/ha |  | 232500 | 176000 | 1.32 |
| T.O.2: Spraying of Dimethoate 30% EC (0.2%) at 8 DAP & propargite 57 EC (0.15%) at 15 DAP | UAS Bengaluru | 54750 | kg/ha |  | 273750 | 175500 | 1.55 |
| T.O.3: Spraying of Dimethoate 30% EC (0.3%) at 8 DAP & Fenzaguin (1.5 ml/l) (20 days)/ Cyenopyrafen (0.5 ml/l) (15 days) / wettable sulphur (80%) 3 g/l. (5 days) | CSRTI, Mysuru | 56700 | kg/ha |  | 283700 | 178250 | 1.59 |
| T.O.4: Spraying of Fungus (Shatpada-All rounder) - @ 20 gm/litre & Bacteria (Shatpada-Master Blaster) - @ 20 gm/litre | NBAIR, Bengaluru | 54250 | kg/ha |  | 271250 | 173750 | 1.56 |
| T.O.5: Release of bioagents: Green lacewing (*Chrysoperla sp*.) and *Blaptostheus pallascens* (1000 eggs / ac) | CSRTI, Mysuru |  |  |  |  |  |  |

4. C2. Feedback on technologies assessed

|  |  |  |
| --- | --- | --- |
| Name of technology assessed | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
| Assessing the performance of Hybrid Napier varieties under Chamarajanagara District |  |  |
| Assessment of nutrient management in Potato | Reduced disease incidence, production of marketable grade and cost effective. | Non- availability of critical inputs (Gypsum) timely. |
| Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize | Quick growth response, easy transportation and handling | - |
| Assessment of suitable short duration Turmeric varieties for higher yield and quality | Short duration Pragathi, Rajendra sonia and Petambari varieties were over by within 200 days duration. These varieties are 75 - 85 days earlier without compromising the yield and quality as compared to local check. | Non - availability of the quality seed rhizomes locally. |
| Assessment of different propagation methods in potato | Quality of varieties can be maintained and depending on unknown source for seed tubers can be overcome. The main constraint is the spacing and intercultural operations has to follow properly, otherwise quality of seed tubers reduce. | Local nursery men or farmers are not aware about ARC technology. |
| Assessment of technologies for the management of Panama wilt disease in Banana |  |  |
| Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry (2nd Year) | Use of waste decomposer hastens the process of decomposition particularly mulberry shoots (lignin content).  Improved water holding capacity, reduces week populations | Laborious, needs mechanical implements  Requires huge quantities of bio-mass |
| Assessment on Management of Mites and Thrips in Mulberry | Application of bio-agents with integrated approach is effective.  More no. of sprays and also risk involved in spraying of bio-pesticides. | Availability and expire of the bio-agents need to be known.  Safe period of the bio - agents needs to be assessed. |

4.C3. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. Title of Technology Assessed: **Assessing the performance of Hybrid Napier varieties under Chamarajanagara District**

2. Performance of the Technology on specific indicators: **PBN - 342 variety has recorded higher fodder yield, high protein content and less oxalic acid content.**

3. Specific Feedback from farmers: **PBN - 342 variety recorded higher fodder yield with good palatability**

4. Specific Feedback from Extension personnel and other stakeholders: **N I L**

5. Feedback to Research System based on results and feedback received: **PBN - 342 variety has been accepted for endorsement for zone-VI, Karnataka.**

6. Feedback on usefulness and constraints of technology: **N I L**

1. Title of Technology Assessed: **Assessment of nutrient management in Potato**

2. Performance of the Technology on specific indicators: **Reduced incidence of blight disease, quality yield and increased returns.**

3. Specific Feedback from farmers: **Due to Calcium and Sulphur nutrition, reduction in the incidence of blight disease, quality yield and increase net profit.**

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

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

6. Feedback on usefulness and constraints of technology: --

1. Title of Technology Assessed: **Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize**

2. Performance of the Technology on specific indicators: **Enhanced growth and yield parameters, increased yield**

3. Specific Feedback from farmers: **Easy transportation and handling, quick growth response**

4. Specific Feedback from Extension personnel and other stakeholders:

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

6. Feedback on usefulness and constraints of technology

1. Title of Technology Assessed: **Assessment of suitable short duration Turmeric varieties for higher yield and quality**

2. Performance of the Technology on specific indicators: **Earliness without compromising the yield and quality**

3. Specific Feedback from farmers: **Improved varieties are suitable for Seed production**

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

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

6. Feedback on usefulness and constraints of technology: **Short duration Pragathi, Rajendra sonia and Petambari varieties were over by within 200 days duration. These varieties are 75 - 85 days earlier without compromising the yield and quality as compared to local check;** Constraints**: Non - availability of the quality seed rhizomes locally.**

1. Title of Technology Assessed: **Assessment of different propagation methods in potato**

2. Performance of the Technology on specific indicators: **Farmer can self sustain with respect to potato propagation material**

3. Specific Feedback from farmers: **Good technology but intercultural operation and spacing need to follow properly,**

4. Specific Feedback from Extension personnel and other stakeholders

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

6. Feedback on usefulness and constraints of technology: **Quality of varieties can be maintained and depending on unknown source for seed tubers can be overcome. The main constraint is the spacing and intercultural operations has to follow properly, otherwise quality of seed tubers reduce;** Constraints**: Local nursery men or farmers are not aware about ARC technology.**

1. Title of Technology Assessed: **Assessment of technologies for the management of Panama wilt disease in Banana**

2. Performance of the Technology on specific indicators

3. Specific Feedback from farmers

4. Specific Feedback from Extension personnel and other stakeholders **Crop is at Critical growth stage**

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

6. Feedback on usefulness and constraints of technology

1. Title of Technology Assessed: **Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry**

2. Performance of the Technology on specific indicators: **Very effective indicating, > moisture holding (WHC), less weeds stable with interval (gap) of rains**

3. Specific Feedback from farmers: **Very useful technology but laborious to adopt.**

4. Specific Feedback from Extension personnel and other stakeholders: **Requires huge biomass, ensuring the same is very important.**

5. Feedback to Research System based on results and feedback received: **Availability of technology to be made timely.**

6. Feedback on usefulness and constraints of technology: **Very useful technology, helps in efficient recycling of bulk biomass, but it is laborious to farmers for adoption.**

1. Title of Technology Assessed: **Assessment on Management of Mites and Thrips in Mulberry**

2. Performance of the Technology on specific indicators:  **Integrated approach is found effective.**

3. Specific Feedback from farmers: **Demands more sprays ( 2 - 3) per crop and laborious**

4. Specific Feedback from Extension personnel and other stakeholders: **Bioassay of bio pesticides needs to be assessed, Safely period to silk worms to be assessed.**

5. Feedback to Research System based on results and feedback received: N**eed to be** **assessed at lab condition before introducing to the farmers.**

6. Feedback on usefulness and constraints of technology: **Integrated approach is very effective in managing these pests, difficult to adopt and manage the pest once it is**

**spread.**

**4.D1. Results of Technologies Refined N I L**

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

4. D2. Feedback on technologies refined N I L

|  |  |  |
| --- | --- | --- |
| Name of technology refined | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
|  |  |  |

4.D.2. Details of Technologies refined: N I L

1. Title of Technology Refined

2. Performance of the Technology on specific indicators

3. Specific Feedback from farmers

4. Specific Feedback from Extension personnel and other stakeholders

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

6. Feedback on usefulness and constraints of technology

**PART V - FRONTLINE DEMONSTRATIONS**

**5.A. Summary of FLDs implemented**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No. | Category | Farming  Situation | Season | Crop | Variety/ breed | Hybrid | Thematic area | Technology Demonstrated | Area (ha) | | Farmers (No.) | | Farmers (No.) | |
| Proposed | Actual | SC/ST | Others | Small/ Marginal | Others |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Pulses | Rainfed | Kharif | Blackgram | LBG-791 | - | ICM | * Use of Improved variety- LBG-791 * Application of ZnSO4 (10 kg/ha) * Foliar spray of DAP (2%) at 45 DAS. * Application of need based plant protection chemicals | 4.00 | 4.00 | 0 | 10 | 10 | 00 |
|  | Rainfed | Rabi | Redgram | BRG-3 | - | * Use of Improved variety- BRG-3 (Wilt and sterility mosaic virus disease resistant) * Application of biofertilizers viz., Rhizobium & PSB @ 500g/ha each. * Application of ZnSO4 (15 kg/ha) * Application of need based plant protection chemicals | 4.00 | 4.00 | 06 | 04 | 10 | 00 |
|  | Rainfed | Rabi | Chickpea | BGD-103 | - | * Use of Improved variety- BGD-103 (Wilt disease resistant) * Application of biofertilizers viz., Rhizobium & PSB @ 500g/ha each. * Application of ZnSO4 (15 kg/ha) * Application of need based plant protection chemicals | 4.00 | 4.00 | 01 | 09 | 10 | 00 |
|  | Rainfed | Rabi | Field bean | HA-3 | - | * Use of Improved variety- HA-3 * Seed treatment with rhizobium and PSB (500g each/ha) * Application of ZnSO4 (10 kg/ha) * Foliar spray of DAP (2%) at 45 DAS. * Application of need based plant protection chemicals | 4.00 | 4.00 | 00 | 10 | 10 | 00 |
|  | Cereals | Irrigated | Kharif | Paddy | - | - | ICM | * Direct seeding of paddy through drum seeder * Application of biofertilizers *viz.*, Azospirillum & PSB @ 500g/ha * Application of ZnSO4 @ 20 kg/ha * Integrated weed management practices (Pre-emergence herbicide @3 DAS + Early post emergence application of herbicide @ 15 DAS fb passing cone weeder @ 30 DAS). * Application of need based plant protection chemicals | 4.00 | 4.00 | 00 | 16 | 10 | 00 |
|  | Millets | Rainfed | Kharif | Ragi | KMR-630 | - | ICM | * Introduction of short duration variety and blast resistant variety KMR 630. * Seed treatment with biofertilizer *viz.,* Azospirillum and PSB @ 200g/acre each * Application of Zinc sulphate (4kg/acre). * Application of need based plant protection chemicals | 4.00 | 4.00 | 04 | 06 | 10 | 00 |
|  | Irrigated | Kharif | MR-6 | - | INM | * Application of FYM (4 t/acre) * Seed treatment with Azospirillum 400 g/ha * RDF- 50:37.5:40 kg/acre * Micronutrients ZnSO4- 12.5 kg/ha & Borax- 10 kg/ha * Need based plant protection measures | 4 | 4 | 10 | 0 | 7 | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vegetables | Irrigated | Late Kharif | Tomato | - | Arka Abhed | ICM | * Hybrid Seed Arka Abhed * Use of bio-agent enriched FYM * Growing marigold as trap crop * Spray of vegetable special @ 5 gm per litre * Use of sticky traps, * Use of Pheromone traps * Use of Neem/ Pongamia soap/ *Verticillium* & Need based pp chemicals. | 2 | 2 | 00 | 10 | 10 | 0 |
|  |  | Irrigated | Summer | Small Onion | Local | - | IPDM | * Preparation of raised bed * Bulb treatment with *Trichoderma harzianum* 10 gm per kg . * Use of 1 kg bio pesticides – *Trichoderma harzianum* + *Pseudomonas fluoresces* + *Paecliomyces lilacinus* + 50 kg Neem or Pongamia cake to enrich 1 ton of farm yard manure and leave it for 15 – 20 days by maintaining moisture * Spray of vegetable special * Use of sticky traps, 20 per acre * Use of Neem / Pongamia soap @ 5ml per litre / *Verticillium @* 10 ml per litre * Need based pp chemicals (Farmers contribution) | 4.8 | 4.8 | 02 | 08 | 6 | 4 |
|  |  | Irrigated | Rabi | Cabbage | - | - | ICM | * Intercropping with Mustard (trap crop) (25:2), Installation of WOTA-T traps (DBM traps) * Use of Sticky traps, Spray of Bt (1ml/l), Neem Soap (5g/l) * Entomopathogenic fungi (*Beauveria bassiana/ Verticilliam leccani / Metarhizium anisopliae*) (0.2%), * Emamectin benzoate 5SG (0.05%), Chlorfenapyr 10SC (0.1%), Spinosad 2.5SC (0.15)%, veg.spl * Spraying of CoC + Streptocycline | 1 | 1 | 00 | 10 | 8 | 2 |
|  | Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fruit | Irrigated | Summer | Watermelon | - | - | ICM | * Application of FYM/Compost @ 20 t/ha with Bio control agents *viz.,-* Arka Microbial Consortia (AMC) @12.5 kg/ha , *Trichoderma horzianum* 2 Kg/ha *Paeciliomyces lilacinus* 2 Kg/ha , * Soil test based fertilizer application (55:55:55 Kg N:P:K/ha) * Soil drenching with Carbendizim @ 2g/l * Use of fruit fly traps 10/ha * Use of Yellow sticky traps 25/ha * Installation of beehive box @ 1 per plot * Foliar application of vegetable special @ 1 gram/l * Foliar spray of Acephate @ 1 g/l | 4.00 | 4.00 | 04 | 06 | 10 | 00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Spices and condiments | Irrigated | Kharif | Turmeric | IISR Pragathi | - | ICM | Short duration improved Turmeric variety IISR Pragathi - Fresh rhizome yield (38t/ha), curcumin content (4-5%), Dry recovery (18%), **Duration 192 days.** | 4.00 | 4.00 | 02 | 08 | 10 | 00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Commercial | Irrigated | Late Kharif | Sugarcane | VCF-0517 | - | Resource management | Sugarcane trash composting using urea and Pleurotus | 8 | 8.4 | 0 | 21 | 3 | 18 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Plantation | Irrigated | Late Kharif | Banana | Yelakki | - | IDM | * Selection of healthy suckers (Source: UHSB) * Dipping of Rhizome in carbendazim (0.1%) for 30 minutes * Paring and pralinage * Good drainage * Use Marigold as trap crop * Pit application of *Trichoderma harzianum 25 gm Pseudomonas* 25 gm + *Paeciliomyces 1*2.5gm + 500 gm of Neem cake along with FYM and repeated application of bioagents 2nd, 4th and 6th month after planting * Soil test based fertilizer application * Spraying of Banana special 5 gm per liter @ 5th , 6th, 7th , 8th and 9th months * Removal of sigatoka infected leaves and burn it * Foliar spray of Propiconazole 0.5 ml per liter + Mineral oil 10 ml per liter (3 times @ 20 days interval after appearance of sigatoka disease) | 1 | 1 | 00 | 10 | 5 | 5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Dairy |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Piggery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Common carps |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mussels |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental fishes |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sericulture | Rainfed | - | Mulberry | - | - | IPM | * Mechanical management (nipping of apical portion @ initial stage) * Spray of neem oil @ 1 ml/liter (10000 PPM) - 20 days after pruning (dap) * Release of Trichogramma chilonis cards @ 4 cards / acre & Bracondis (250 nos/ac) on weekly basis for 4 weeks from 25th day after pruning | 2 | 2 | 00 | 10 | 6 | 4 |
|  |  | - | - | Cocoon | - | FC1 & FC2 | Up scaling the technology | Bivoltine breeds CSR-2, FC-1 and FC-2 (Source: CSRTI, Mysore) | 100 DFLs / farmers | 100 DFLs / farmers |  |  | 6 | 4 |
|  |  | - | - | Cocoon | - | FC1 X FC2 | Popularization | Silkworm Bivoltine double hybrid FC-1 X FC-2 (Source: CSRTI, Mysore) | 100 DFLs / farmers | 100 DFLs / farmers |  |  | 6 | 4 |
|  |  | - | - | Cocoon | - | - | Resource conservation | * Demonstrating JHA technology for enhanced larval period 10 ml in 5 liters of water for 100 DFLs (Source: CSRTI, Mysuru) | 100 DFLs / farmers | 100 DFLs / farmers |  |  | 6 | 4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Implements |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Others (specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Category** | **Farming**  **Situation** | **Season**  **and**  **Year** | **Crop** | **Variety/ breed** | **Hybrid** | **Thematic area** | **Technology Demonstrated** | **Season and year** | **Status of soil** | | | **Previous crop grown** |
| N | P | K |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Pulses | Rainfed | Kharif 2021 | Blackgram | LBG-791 | - | ICM | * Use of Improved variety- LBG-791 * Application of ZnSO4 (10 kg/ha) * Foliar spray of DAP (2%) at 45 DAS. * Application of need based plant protection chemicals | Kharif 2021 | 172.67 | 18.26 | 188.67 | Maize |
|  | Rainfed | Rabi | Redgram | BRG-3 |  | ICM | * Use of Improved variety- BRG-3 (Wilt and sterility mosaic virus disease resistant) * Application of biofertilizers viz., Rhizobium & PSB @ 500g/ha each. * Application of ZnSO4 (15 kg/ha) * Application of need based plant protection chemicals | Rabi | 192.8 | 23.98 | 417.9 | Ragi |
|  | Rainfed | Rabi | Chickpea | BGD-103 |  | ICM | * Use of Improved variety- BGD-103 (Wilt disease resistant) * Application of biofertilizers viz., Rhizobium & PSB @ 500g/ha each. * Application of ZnSO4 (15 kg/ha) * Application of need based plant protection chemicals | Rabi | 167.3 | 18.1 | 189.6 | Blackgram |
|  | Rainfed | Rabi | Field bean | HA-3 |  | ICM | * Use of Improved variety- HA-3 * Seed treatment with rhizobium and PSB (500g each/ha) * Application of ZnSO4 (10 kg/ha) * Foliar spray of DAP (2%) at 45 DAS. * Application of need based plant protection chemicals | Rabi | 188.2 | 40.5 | 396.2 | Maize |
|  | Cereals | Irrigated | Kharif | Paddy |  | - | ICM | * Direct seeding of paddy through drum seeder * Application of biofertilizers *viz.*, Azospirillum & PSB @ 500g/ha * Application of ZnSO4 @ 20 kg/ha * Integrated weed management practices (Pre-emergence herbicide @3 DAS + Early post emergence application of herbicide @ 15 DAS fb passing cone weeder @ 30 DAS). * Application of need based plant protection chemicals | Kharif | 183.1 | 23.3 | 186.3 | Green Manure |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Millets | Irrigated | Kharif-2021 | Ragi | MR-6 | - | INM | * Application of FYM (4 t/acre) * Seed treatment with Azospirillum 400 g/ha * RDF- 50:37.5:40 kg/acre * Micronutrients ZnSO4- 12.5 kg/ha & Borax- 10 kg/ha * Need based plant protection measures | Kharif - 2021 | L | M | H | Cowpea |
|  | Rainfed | Kharif | Ragi | KMR-630 | - | ICM | * Introduction of short duration variety and blast resistant variety KMR 630. * Seed treatment with biofertilizer *viz.,* Azospirillum and PSB @ 200g/acre each * Application of Zinc sulphate (4kg/acre). * Application of need based plant protection chemicals | Kharif | 150.1 | 24.3 | 168.7 | Greengram |
|  | Vegetables | Irrigated | Late Kharif | Tomato | - | Arka Abhed | ICM | * Hybrid Seed Arka Abhed * Use of bio-agent enriched FYM * Growing marigold as trap crop * Spray of vegetable special @ 5 gm per litre * Use of sticky traps, * Use of Pheromone traps * Use of Neem/ Pongamia soap/ *Verticillium* & Need based pp chemicals. | *Kharif* 2021 | **178.6** | **19.3** | **186.3** | Banana |
|  |  | Irrigated | Rabi | Small Onion | Local | - | IPDM | * Preparation of raised bed * Bulb treatment with *Trichoderma harzianum* 10 gm per kg . * Use of 1 kg bio pesticides – *Trichoderma harzianum* + *Pseudomonas fluoresces* + *Paecliomyces lilacinus* + 50 kg Neem or Pongamia cake to enrich 1 ton of farm yard manure and leave it for 15 – 20 days by maintaining moisture * Spray of vegetable special * Use of sticky traps, 20 per acre * Use of Neem / Pongamia soap @ 5ml per litre / *Verticillium @* 10 ml per litre * Need based pp chemicals ( Farmers contribution) | Rabi | 1.71.5. | 19.3 | 186.3 | Maize |
|  |  | Irrigated | Rabi | Cabbage | - | - | ICM | * Intercropping with Mustard (trap crop) (25:2), Installation of WOTA-T traps (DBM traps) * Use of Sticky traps, Spray of Bt (1ml/l), Neem Soap (5g/l) * Entomopathogenic fungi (*Beauveria bassiana/ Verticilliam leccani / Metarhizium anisopliae*) (0.2%), * Emamectin benzoate 5SG (0.05%), Chlorfenapyr 10SC (0.1%), Spinosad 2.5SC (0.15)%, veg.spl * Spraying of CoC + Streptocycline | Rabi | 168.80 | 18.3 | 176.3 | Tomato |
|  | Flowers |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fruit | Irrigated | Summer | Watermelon | - | - | ICM | * Application of FYM/Compost @ 20 t/ha with Bio control agents *viz.,-* Arka Microbial Consortia (AMC) @12.5 kg/ha , *Trichoderma horzianum* 2 Kg/ha *Paeciliomyces lilacinus* 2 Kg/ha , * Soil test based fertilizer application (55:55:55 Kg N:P:K/ha) * Soil drenching with Carbendizim @ 2g/l * Use of fruit fly traps 10/ha * Use of Yellow sticky traps 25/ha * Installation of beehive box @ 1 per plot * Foliar application of vegetable special @ 1 gram/l * Foliar spray of Acephate @ 1 g/l | Summer | Summer 2021 | 165.9 | 18.9 | 179.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Spices and condiments | Irrigated | Kharif | Turmeric | IISR Pragathi | - | ICM | * Short duration improved Turmeric variety IISR Pragathi - Fresh rhizome yield (38t/ha), curcumin content (4-5%), Dry recovery (18%), **Duration 192 days.** | Kharif - 2021 | M | M | M | Green manure |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Commercial | Irrigated | Kharif - 2021 | Sugarcane | VCF-0517 | - | Resource management | * Sugarcane trash composting using urea and Pleurotus | Kharif - 2021 | L | M | M | Green manure |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fodder |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Plantation | Irrigated | Late Kharif | Banana | Yelakki | - | IDM | * Selection of healthy suckers (Source: UHSB) * Dipping of Rhizome in carbendazim (0.1%) for 30 minutes * Paring and pralinage * Good drainage * Use Marigold as trap crop * Pit application of *Trichoderma harzianum 25 gm Pseudomonas* 25 gm + *Paeciliomyces 1*2.5gm + 500 gm of Neem cake along with FYM and repeated application of bioagents 2nd, 4th and 6th month after planting * Soil test based fertilizer application * Spraying of Banana special 5 gm per liter @ 5th , 6th, 7th , 8th and 9th months * Removal of sigatoka infected leaves and burn it * Foliar spray of Propiconazole 0.5 ml per liter + Mineral oil 10 ml per liter (3 times @ 20 days interval after appearance of sigatoka disease) | Rabi 2021 | 161.5 | 17.3 | 176.3 | Small Onion |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fiber |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sericulture | Rainfed | - | Mulberry | - | - | IPM | * Mechanical management (nipping of apical portion @ initial stage) * Spray of neem oil @ 1 ml/liter (10000 PPM) - 20 days after pruning (dap) * Release of Trichogramma chilonis cards @ 4 cards / acre & Bracondis (250 nos/ac) on weekly basis for 4 weeks from 25th day after pruning | - |  |  |  |  |
|  | - | - | Cocoon | - | FC1 & FC2 | Up scaling the technology | * Bivoltine breeds CSR-2, FC-1 and FC-2 (Source: CSRTI, Mysore) |  |  |  |  |  |
|  | - | - | Cocoon | - | FC1 X FC2 | Popularization | * Silkworm Bivoltine double hybrid FC-1 X FC-2 (Source: CSRTI, Mysore) |  |  |  |  |  |
|  | - | - | Cocoon | - | - | Resource conservation | * Demonstrating JHA technology for enhanced larval period 10 ml in 5 liters of water for 100 DFLs (Source: CSRTI, Mysuru) |  |  |  |  |  |

**5.B. Results of FLDs**

**5.B.1. Crops**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop | Name of the technology demonstrated | Variety | Hybrid | Farming situation | No. of Demo. | Area  (ha) | Yield (q/ha) | | |  | % Increase | Economics of demonstration (Rs./ha) | | | Economics of Check (Rs./ha) | | |
|  |  |  |  |  |  |  | Demo | | | Check |  | Gross  Return | Net Return | BCR | Gross  Return | Net Return | BCR |
|  |  |  |  |  |  |  | H | L | A |  |  |  |  |  |  |  |  |
| Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pulses | Demonstration of Blackgram variety LBG-791 | LBG-791 | - | Rainfed | 10 | 4.0 | 5.68 | 4.82 | 5.15 | 288 | 78.82% | 33475 | 9058 | 1.37 | 18720 | -1501 | 0.77 |
|  | Demonstration of Redgram variety BRG-3 | BRG-3 | - | Rainfed | 10 | 4.0 | 69.9 | 52.8 | 61.9 | 44.30 | 39.73% | 136136 | 100243 | 3.79 | 88600 | 51113 | 2.36 |
|  | Demonstration of Chickpea variety BGD-103 | BGD-103 | - | Rainfed | 10 | 4.0 | 15.84 | 14.30 | 14.89 | 12.91 | 15.34 % | 75944 | 43109 | 2.34 | 64550 | 32986 | 2.04 |
|  | Integrated crop management in Field bean | HA-3 | - | Rainfed | 10 | 4.0 | 21.55 | 19.73 | 20.54 | 19.13 | 12.65 | 53875 | 22625 | 1.73 | 45912 | 10387 | 1.29 |
| Cereals | Demonstration of Drum Seeded Rice | - | - | Irrigated | 10 | 4.0 | 67.80 | 59.50 | 63.90 | 54.80 | 16.61% | 113428 | 55496 | 1.96 | 98820 | 33063 | 1.50 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Millets | Demonstration of Ragi variety KMR-630 | KMR-630 |  | Rainfed | 10 | 4.0 | 18.70 | 16.20 | 17.30 | 13.50 | 28.15% | 33841 | 11467 | 1.51 | 25800 | 1683 | 1.07 |
|  | STCR based nutreint management in irrigated Ragi | MR-6 | - | Irrigated | 10 | 4 | 32.8 | 25.5 | 29.2 | 24.70 | 18.2 | 61500 | 31500 | 2.05 | 52000 | 28000 | 1.86 |
| Vegetables | Integrated Crop Management in Tomato | - | Arka Abhed | Irrigated | 10 | 2 | 375 | 165 | 212 | 107 | 50.17 | 1221333 | 1056000 | 5.39 | 1312000 | 864160 | 2.93 |
|  | Integrated management of Pest and Diseases in Small onion | Local | - | Irrigated | 10 | 4 | 155 | 77.59 | 115 | 82.50 | 28.26 | 368000 | 238000 | 1.83 | 264000 | 124000 | 0.88 |
|  | Integrated Crop Management in Cabbage | - | - | Irrigated | 10 | 1 | 2320 | 1659 | 2200 | 1800 | 22.22 | 396000 | 248500 | 1.68 | 324000 | 161500 | .1.00 |
| Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit | Integrated Crop Management in Watermelon |  | Max | Irrigated | 10 | 4 | Crop is at fruit development to maturity stage | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spices and condiments | Popularization short duration improved Turmeric variety IISR Pragathi | IISR Pragathi | - | Irrigated | 10 | 4 | 40.62 | 36.12 | 38.38 | 25.85 | 48.47 | 581625 | 417716.5 | 3.21 | 353385 | 183924.2 | 2.08 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial | Sugarcane trash management | VCF-0517 | - | Irrigated | 21 | 8.4 | **UNDER PROGRESS** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre crops like cotton | Integrated Disease Management in Banana (Yelakki) | Yelakki | - | Irrigated | 5 | 1 | **UNDER PROGRESS** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sericulture | Demonstration of IPM practices for management of leaf roller in Mulberry | Victory - 1 | - | Irrigated | 10 | 0.4 ha |  |  | 0.54 | 0.45 | 20.0 | 270965 | 152627 | 2.28 | 160910 | 77515 | 1.92 |
| Promoting / Up scaling to Seed cocoon producers (silkworm single hybrids) FC-1 and FC-2 | Bivoltine | FC 1 , FC 2 and CSR 2 | Irrigated | 05 | 100 DFLs/Farmer | 84 | 74 | 79 | 72 | 7.0 | 55300 / 100 DFLs | 41700 / 100 DFLs | 4.10 | 34130/ 100 DFLs | 21638 / DFLs | 2.73 |
| Scaling up of improved silkworm hybrid FC-1 X FC-2 | Bivoltine | Double Cross Hybrid | Irrigated | 10 | 100 DFLs/Farmer | 88 | 76 | 82 | 72.5 | 9.5 | 49200 / 100 DFLs | 37700 / 100 DFLs | 3.27 | 32625 / 100 DFLs | 20125 / 100 DFLs | 1.61 |
| Demonstration on Samruddhi (JHA Technology) for enhanced cocoon / silk production | Bivoltine | Double Cross Hybrid | Irrigated | 10 | 100 DFLs/Farmer | 90 | 82 | 86 | 73.5 | 12.5 | 55900 / 100 DFLs | 43700 / 100 DFLs | 3.58 | 35400 / 100 DFLs | 23150 / 100 DFLs | 1.88 |

\* 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** |
| **Cereals** |  |  |
| Ragi - STCR based nutreint management in irrigated Ragi | Plant Height: 102.2 cm  No. of tillers: 4.9  1000 grains weight: 3.17 g | 95.7 cm  3.6  2.89 g |
|  |  |  |
|  |  |  |
| **Commercial Crops** |  |  |
| Sugarcane: Sugarcane trash management | No of. Tillers: 12.7  No. of days for trash decomposition: 74 to 78 days | 10.3  More than 105 days |
|  |  |  |
|  |  |  |

5. B2. Feed back on technologies demonstrated

|  |  |  |
| --- | --- | --- |
| Name of technology demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
| Ragi - STCR based nutrient management in irrigated Ragi | INM resulted in favorable growth and profitable yield | Non availability of fertilizers timely. |
| Sugarcane: Sugarcane trash management | Easy way of trash management, improvement in growth | Non availability of quality Biofertilizers timely. |
| ICM in Field bean | ICM helps in better pest management, reduction in the cost of cultivation | Timely non availability of seeds and Biofertilizers |
| Popularization short duration improved Turmeric variety IISR Pragathi | Short duration Pragathi, Rajendra sonia and Petambari varieties were over by within 200 days duration. These varieties are 75 - 85 days earlier without compromising the yield and quality as compared to local check;  Constraints: Non - availability of the quality seed rhizomes locally. | Constraints: Non - availability of the quality seed rhizomes locally. |

5. B. 3. Live stock and related enterprises N I L

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of livestock | Name of the technology demonstrated | Breed | No. of Demo | No.  of Units | Name of the parameter with unit | Yield (kg/animal) | | | | % Increase | \*Economics of demonstration Rs./unit) | | | \*Economics of check  (Rs./unit) | | |
| Demo | | | Check if any | Gross  Return | Net Return | \*\*  BCR | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  |  | H | L | A |  |  |
| Dairy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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.4. Feedback on livestock technologies demonstrated N I L

|  |  |  |
| --- | --- | --- |
| Name of livestock technology demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
|  |  |  |

5.B.5. Fisheries N I L

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

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

\*\* BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5. B6. Feedback on fisheries technologies demonstrated N I L

|  |  |  |
| --- | --- | --- |
| Name of fisheries technology demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
|  |  |  |

5.B.7. Other enterprises N I L

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Enterprise | Name of the technology demonstrated | Variety/ species | No. of Demo | Units/ Area {m2} | Name of the parameter with unit | Yield | | | | % Increase | \*Economics of demonstration (Rs./unit) or (Rs./m2) | | | \*Economics of check  (Rs./unit) or (Rs./m2) | | |
| Demo | | | Check if any | Gross  Return | Net Return | \*\*  BCR | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  |  | H | L | A |  |  |
| Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

\*\* BCR= Gross Return/Gross Cost

H-High L-Low, A-Average

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

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

5. B.8. Feedback on enterprises demonstrated

|  |  |  |
| --- | --- | --- |
| Name of enterprise demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
|  |  |  |

5.B.9. Farm implements and machinery \*\*\* Purchase under progress \*\*\*

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

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

\*\* BCR= Gross Return/Gross Cost

**Data on additional parameters other than labour saved (viz., reduction in drudgery, time etc.)**

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

5. B.10. Feedback on farm implements demonstrated

|  |  |  |
| --- | --- | --- |
| Name of farm implement demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
|  |  |  |
|  |  |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Activity** | **No. of activities organised** | **Number of participants** | **Remarks** |
| 1 | Field days | 15 | 448 |  |
| 2 | Farmers Training | 52 | 1433 |  |
| 3 | Media coverage | 59 | - |  |
| 4 | Training for extension functionaries | 02 | 85 |  |
| 5 | Others (Please specify) | - | - |  |

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS**

**Demonstration details on crop hybrids**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Breed | Name of the technology demonstrated | Name of the hybrid | No. of Demo | Area (ha) | Yield (q/ha) | | | | % Increase | \*Economics of demonstration (Rs./ha) | | | \*Economics of check  (Rs./ha) | | |
| Demo | | | Check | Gross  Return | Net Return | \*\*  BCR | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  | H | L | A |  |  |
| **Cereals** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bajra |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maize |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Paddy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sorghum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wheat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Oilseeds** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Castor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mustard |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Safflower |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sesame |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sunflower |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Groundnut |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soybean |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Pulses** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Greengram |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Blackgram |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bengalgram |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Redgram |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vegetable crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bottle gourd |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capsicum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify)  Cabbage | Integrated Crop Management in Cabbage | Saint | 10 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cucumber |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tomato | Integrated Crop Management in Tomato | Arka Abhed | 10 | 2 |  |  |  |  |  |  |  |  |  |  |  |
| Brinjal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Okra |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Onion |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Potato |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Field bean |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Commercial crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sugarcane |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Coconut |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fodder crops |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maize (Fodder) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sorghum (Fodder) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl. specify)  **Watermolon** | Integrated Crop Management in Watermelon | Sugar Queen | 10 | 4 |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

H-High L-Low, A-Average

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

Feedback on crop hybrids demonstrated

|  |  |  |
| --- | --- | --- |
| Name of crop hybrid demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
|  |  |  |
|  |  |  |

**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 | 01 | 00 | 00 | 00 | 27 | 23 | 50 | 27 | 23 | 50 |
| Resource Conservation Technologies | 01 | 14 | 02 | 16 | 00 | 00 | 00 | 14 | 02 | 16 |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming | 02 | 28 | 06 | 34 | 02 | 02 | 04 | 30 | 08 | 38 |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production | 02 | 19 | 01 | 20 | 00 | 00 | 00 | 19 | 01 | 20 |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 06 | 91 | 12 | 103 | 48 | 17 | 65 | 139 | 29 | 158 |
| Soil and Water Conservation | 01 | 03 | 10 | 13 | 06 | 06 | 12 | 09 | 16 | 25 |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify)  Sensitization of farmers on large scale use of climate resilient agriculture methods and technologies | 01 | 29 | 10 | 39 | 05 | 08 | 13 | 34 | 18 | 52 |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify)  ICM | 03 | 62 | 05 | 67 | 01 | 02 | 03 | 63 | 07 | 70 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 02 | 17 | 03 | 20 | 04 | 00 | 04 | 21 | 03 | 24 |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques | 01 | 11 | 02 | 13 | 02 | 02 | 04 | 13 | 04 | 17 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management |  |  |  |  |  |  |  |  |  |  |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology | 01 | 107 | 00 | 107 | 15 | 01 | 16 | 123 | 01 | 124 |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify)  Rapid multiplication techniques in Turmeric | 01 | 19 | 02 | 21 | 08 | 03 | 11 | 27 | 05 | 32 |
| **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 | 01 | 03 | 00 | 03 | 07 | 00 | 07 | 10 | 00 | 10 |
| Production and use of organic inputs | 02 | 19 | 18 | 37 | 12 | 01 | 13 | 31 | 19 | 50 |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| 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 | 01 | 20 | 14 | 34 | 00 | 26 | 26 | 20 | 40 | 60 |
| 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 | 03 | 00 | 53 | 53 | 00 | 12 | 12 | 00 | 65 | 65 |
| Women empowerment |  |  |  |  |  |  |  |  |  |  |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance |  |  |  |  |  |  |  |  |  |  |
| Installation and maintenance of micro irrigation systems |  |  |  |  |  |  |  |  |  |  |
| Use of Plastics in farming practices |  |  |  |  |  |  |  |  |  |  |
| Production of small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Small scale processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 02 | 32 | 01 | 33 | 00 | 00 | 00 | 32 | 01 | 33 |
| Integrated Disease Management | 02 | 19 | 02 | 21 | 04 | 00 | 04 | 23 | 02 | 25 |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Fisheries** |  |  |  |  |  |  |  |  |  |  |
| Integrated fish farming |  |  |  |  |  |  |  |  |  |  |
| Carp breeding and hatchery management |  |  |  |  |  |  |  |  |  |  |
| Carp fry and fingerling rearing |  |  |  |  |  |  |  |  |  |  |
| Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| Hatchery management and culture of freshwater prawn |  |  |  |  |  |  |  |  |  |  |
| Breeding and culture of ornamental fishes |  |  |  |  |  |  |  |  |  |  |
| Portable plastic carp hatchery |  |  |  |  |  |  |  |  |  |  |
| Pen culture of fish and prawn |  |  |  |  |  |  |  |  |  |  |
| Shrimp farming |  |  |  |  |  |  |  |  |  |  |
| Edible oyster farming |  |  |  |  |  |  |  |  |  |  |
| Pearl culture |  |  |  |  |  |  |  |  |  |  |
| Fish processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| Seed Production | 01 | 00 | 00 | 00 | 31 | 19 | 50 | 31 | 19 | 50 |
| 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) |  |  |  |  |  |  |  |  |  |  |
| **CapacityBuilding and Group Dynamics** |  |  |  |  |  |  |  |  |  |  |
| Leadership development |  |  |  |  |  |  |  |  |  |  |
| Group dynamics |  |  |  |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Mobilization of social capital |  |  |  |  |  |  |  |  |  |  |
| Entrepreneurial development of farmers/youths | 01 | 12 | 07 | 19 | 00 | 00 | 00 | 12 | 07 | 19 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems |  |  |  |  |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **37** | **480** | **151** | **631** | **182** | **122** | **304** | **662** | **273** | **935** |

**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 | 02 | 08 | 00 | 08 | 20 | 24 | 44 | 28 | 24 | 52 |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems | 01 | 24 | 01 | 25 | 03 | 00 | 03 | 27 | 41 | 68 |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming | 01 | 45 | 00 | 45 | 02 | 00 | 02 | 47 | 00 | 47 |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 04 | 06 | 35 | 41 | 84 | 35 | 119 | 90 | 70 | 160 |
| Soil and Water Conservation | 01 | 01 | 00 | 01 | 13 | 00 | 13 | 14 | 00 | 14 |
| Integrated Nutrient Management | 02 | 39 | 00 | 39 | 17 | 00 | 17 | 56 | 00 | 56 |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify)  ICM | 02 | 32 | 00 | 32 | 01 | 00 | 01 | 33 | 00 | 33 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit |  |  |  |  |  |  |  |  |  |  |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management |  |  |  |  |  |  |  |  |  |  |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | 01 | 00 | 00 | 00 | 30 | 00 | 30 | 00 | 30 | 30 |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management | 02 | 61 | 09 | 70 | 01 | 00 | 01 | 62 | 09 | 71 |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology | 02 | 09 | 07 | 16 | 46 | 18 | 64 | 55 | 25 | 80 |
| 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 |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance |  |  |  |  |  |  |  |  |  |  |
| Installation and maintenance of micro irrigation systems |  |  |  |  |  |  |  |  |  |  |
| Use of Plastics in farming practices |  |  |  |  |  |  |  |  |  |  |
| Production of small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Small scale processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 01 | 17 | 03 | 20 | 00 | 00 | 00 | 17 | 03 | 20 |
| Integrated Disease Management | 01 | 20 | 00 | 20 | 00 | 00 | 00 | 20 | 00 | 20 |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Fisheries** |  |  |  |  |  |  |  |  |  |  |
| Integrated fish farming |  |  |  |  |  |  |  |  |  |  |
| Carp breeding and hatchery management |  |  |  |  |  |  |  |  |  |  |
| Carp fry and fingerling rearing |  |  |  |  |  |  |  |  |  |  |
| Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| Hatchery management and culture of freshwater prawn |  |  |  |  |  |  |  |  |  |  |
| Breeding and culture of ornamental fishes |  |  |  |  |  |  |  |  |  |  |
| Portable plastic carp hatchery |  |  |  |  |  |  |  |  |  |  |
| Pen culture of fish and prawn |  |  |  |  |  |  |  |  |  |  |
| Shrimp farming |  |  |  |  |  |  |  |  |  |  |
| Edible oyster farming |  |  |  |  |  |  |  |  |  |  |
| Pearl culture |  |  |  |  |  |  |  |  |  |  |
| Fish processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| Seed Production |  |  |  |  |  |  |  |  |  |  |
| Planting material production |  |  |  |  |  |  |  |  |  |  |
| Bio-agents production |  |  |  |  |  |  |  |  |  |  |
| Bio-pesticides production |  |  |  |  |  |  |  |  |  |  |
| Bio-fertilizer production |  |  |  |  |  |  |  |  |  |  |
| Vermi-compost production |  |  |  |  |  |  |  |  |  |  |
| Organic manures production |  |  |  |  |  |  |  |  |  |  |
| Production of fry and fingerlings |  |  |  |  |  |  |  |  |  |  |
| Production of Bee-colonies and wax sheets |  |  |  |  |  |  |  |  |  |  |
| Small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Production of livestock feed and fodder |  |  |  |  |  |  |  |  |  |  |
| Production of Fish feed |  |  |  |  |  |  |  |  |  |  |
| Mushroom production |  |  |  |  |  |  |  |  |  |  |
| 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)  Sericulture FPO-ChaSiri | 01 | 36 | 00 | 36 | 02 | 00 | 02 | 38 | 00 | 38 |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems |  |  |  |  |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **22** | **315** | **55** | **370** | **219** | **77** | **296** | **534** | **132** | **666** |

**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 | 02 | 14 | | 02 | | 16 | | 04 | | 30 | | 34 | 18 | 32 | 50 |
| Training and pruning of orchards |  |  | |  | |  | |  | |  | |  |  |  |  |
| Protected cultivation of vegetable crops |  |  | |  | |  | |  | |  | |  |  |  |  |
| Commercial fruit production |  |  | |  | |  | |  | |  | |  |  |  |  |
| Integrated farming |  |  | |  | |  | |  | |  | |  |  |  |  |
| Seed production | 01 | 09 | | 01 | | 10 | | 05 | | 00 | | 05 | 14 | 01 | 15 |
| Production of organic inputs |  |  | |  | |  | |  | |  | |  |  |  |  |
| Planting material production |  |  | |  | |  | |  | |  | |  |  |  |  |
| Vermi-culture |  |  | |  | |  | |  | |  | |  |  |  |  |
| Mushroom Production |  |  | |  | |  | |  | |  | |  |  |  |  |
| Bee-keeping | 01 | 09 | | 03 | | 12 | | 02 | | 01 | | 03 | 11 | 04 | 15 |
| Sericulture |  |  | |  | |  | |  | |  | |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  | |  | |  | |  |  |  |  |
| Value addition |  |  | |  | |  | |  | |  | |  |  |  |  |
| Small scale processing |  |  | |  | |  | |  | |  | |  |  |  |  |
| Post Harvest Technology |  |  | |  | |  |  | |  | |  | |  |  |  |
| Tailoring and Stitching |  |  | |  | |  |  | |  | |  | |  |  |  |
| Rural Crafts |  |  | |  | |  |  | |  | |  | |  |  |  |
| Production of quality animal products |  |  | |  | |  | |  | |  | |  |  |  |  |
| Dairying |  |  | |  | |  | |  | |  | |  |  |  |  |
| Sheep and goat rearing |  |  | |  | |  | |  | |  | |  |  |  |  |
| Quail farming |  |  | |  | |  | |  | |  | |  |  |  |  |
| Piggery |  |  | |  | |  | |  | |  | |  |  |  |  |
| Rabbit farming |  |  | |  | |  | |  | |  | |  |  |  |  |
| Poultry production |  |  | |  | |  | |  | |  | |  |  |  |  |
| Ornamental fisheries |  |  | |  | |  | |  | |  | |  |  |  |  |
| Composite fish culture |  |  | |  | |  | |  | |  | |  |  |  |  |
| Freshwater prawn culture |  |  | |  | |  | |  | |  | |  |  |  |  |
| Shrimp farming |  |  | |  | |  | |  | |  | |  |  |  |  |
| Pearl culture |  |  | |  | |  | |  | |  | |  |  |  |  |
| Cold water fisheries |  |  | |  | |  | |  | |  | |  |  |  |  |
| Fish harvest and processing technology |  |  | |  | |  | |  | |  | |  |  |  |  |
| Fry and fingerling rearing |  |  | |  | |  | |  | |  | |  |  |  |  |
| Any other (pl.specify) |  |  | |  | |  | |  | |  | |  |  |  |  |
| **TOTAL** | **04** | **32** | | **06** | | **38** | **11** | | **31** | | **42** | | **43** | **37** | **80** |

**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 | 01 | 13 | 02 | | 15 | 02 | 03 | 05 | 15 | 05 | 20 |
| Mushroom Production |  |  |  | |  |  |  |  |  |  |  |
| Bee-keeping |  |  |  | |  |  |  |  |  |  |  |
| Sericulture |  |  |  | |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  | |  |  |  |  |  |  |  |
| Value addition |  |  |  | |  |  |  |  |  |  |  |
| Small scale processing |  |  |  | |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  | |  |  |  |  |  |  |  |
| Tailoring and Stitching | 01 | 00 | 08 | | 08 | 00 | 12 | 12 | 00 | 20 | 20 |
| Rural Crafts |  |  |  | |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  | |  |  |  |  |  |  |  |
| Dairying |  |  |  | |  |  |  |  |  |  |  |
| Sheep and goat rearing |  |  |  | |  |  |  |  |  |  |  |
| Quail farming |  |  |  | |  |  |  |  |  |  |  |
| Piggery |  |  |  | |  |  |  |  |  |  |  |
| Rabbit farming |  |  |  | |  |  |  |  |  |  |  |
| Poultry production |  |  |  | |  |  |  |  |  |  |  |
| Ornamental fisheries |  |  |  | |  |  |  |  |  |  |  |
| Composite fish culture |  |  |  | |  |  |  |  |  |  |  |
| Freshwater prawn culture |  |  |  | |  |  |  |  |  |  |  |
| Shrimp farming |  |  |  | |  |  |  |  |  |  |  |
| Pearl culture |  |  |  | |  |  |  |  |  |  |  |
| Cold water fisheries |  |  |  | |  |  |  |  |  |  |  |
| Fish harvest and processing technology |  |  |  | |  |  |  |  |  |  |  |
| Fry and fingerling rearing |  |  |  | |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  |  | |  |  |  |  |  |  |  |
| **TOTAL** | **02** | **13** | **10** | | **23** | **02** | **15** | **17** | **15** | **25** | **40** |

**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 | 01 | 13 | | 08 | | 21 | 15 | 06 | 21 | 28 | 14 | 42 |
| Integrated Pest Management |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Nutrient management |  |  | |  | |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  | |  | |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  | |  | |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  | |  | |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Women and Child care | 01 | 00 | | 12 | | 12 | 00 | 12 | 12 | 00 | 24 | 24 |
| 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** | **02** | **13** | | **20** | | **33** | **15** | **18** | **33** | **28** | **38** | **66** |

**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 | 01 | 13 | | 08 | | 21 | 15 | 06 | 21 | 28 | 14 | 42 |
| Integrated Pest Management | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Integrated Nutrient management | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Rejuvenation of old orchards | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Protected cultivation technology | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Production and use of organic inputs | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Care and maintenance of farm machinery and implements | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Gender mainstreaming through SHGs | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Formation and Management of SHGs | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Women and Child care | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Low cost and nutrient efficient diet designing | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Group Dynamics and farmers organization | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Information networking among farmers | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Capacity building for ICT application | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Management in farm animals | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Livestock feed and fodder production | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Household food security | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Any other (pl.specify) | 00 | 00 | | 00 | | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| **Total** | **01** | **13** | | **08** | | **21** | **15** | **06** | **21** | **28** | **14** | **42** |

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 |  |  |  |  |  |  |  |  |  |  |
| **2** | **Production and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Fruit Plants |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Ornamental plants |  |  |  |  |  |  |  |  |  |  |
| 2.c. | Spices crops |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Soil health and fertility management** | 01 | 11 | 16 | 27 | 01 | 12 | 13 | 12 | 28 | 40 |
| **4** | **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| **5** | **Methods of protective cultivation** |  |  |  |  |  |  |  |  |  |  |
| **6** | **Others (pl.specify)** |  |  |  |  |  |  |  |  |  |  |
| **7** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 7.a. | Processing and value addition | 01 | 00 | 00 | 00 | 00 | 30 | 30 | 00 | 30 | 30 |
| 7.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **8** | **Farm machinery** |  |  |  |  |  |  |  |  |  |  |
| 8.a. | Farm machinery, tools and implements |  |  |  |  |  |  |  |  |  |  |
| 8.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **9.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| **10** | **Livestock production and management** |  |  |  |  |  |  |  |  |  |  |
| 10.a. | Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **11.** | **Home Science** |  |  |  |  |  |  |  |  |  |  |
| 11.a. | Household nutritional security | 01 | 00 | 13 | 13 | 00 | 07 | 07 | 00 | 20 | 20 |
| 11.b. | Economic empowerment of women | 01 | 00 | 11 | 11 | 00 | 14 | 14 | 00 | 25 | 25 |
| 11.c. | Drudgery reduction of women | 01 | 00 | 11 | 11 | 00 | 09 | 09 | 00 | 20 | 20 |
| 11.d. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **12** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 12.a. | CapacityBuilding and Group Dynamics |  |  |  |  |  |  |  |  |  |  |
| 12.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | **Total** | **05** | **11** | **51** | **62** | **01** | **42** | **43** | **12** | **93** | **105** |

**Details of sponsoring agencies involved**

1. Skill development centre, Dept. of Food Science and Nutrition, UAS, GKVK, Bengaluru

2. Rashtriya Chemicals and Fertilizers Limited

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

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

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.**  **No.** | **Name of Job Role** | **Date**  **of Start** | **Date of Close** | **Total**  **Participants** | **No. of Participants** | | | | | | | | | **Date**  **of**  **Assessment** | **No of Participants passed**  **assessment** |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** | Sericulturist | 05.08.2021 | 30.08.2021 | 25 | 20 | 00 | 20 | 05 | 05 | 05 | 25 | 00 | 25 | - | - |
| 2. | Nursery Worker | 08.03.2021 | 03.04.2021 | 20 | 15 | 02 | 17 | 01 | 02 | 03 | 16 | 04 | 20 | 13.11.2021 | 20 |
| 3 | Apiculture | 26.07.2021 | 31.07.2021 | 15 | 09 | 03 | 12 | 02 | 01 | 03 | 11 | 04 | 15 | - | 15 |

**PART VIII – EXTENSION ACTIVITIES**

**8.1. 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** |
| Advisory services | 5997 | 3767 | 204 | 3971 | 1842 | 36 | 1878 | 92 | 56 | 148 |
| Farmers visit to KVKs | 1683 | 1128 | 38 | 1166 | 334 | 86 | 420 | 46 | 51 | 97 |
| Lectures delivered as resource persons | 35 | 922 | 358 | 1280 | 613 | 122 | 735 | 00 | 00 | 00 |
| Diagnostic Visits | 06 | 12 | 00 | 12 | 06 | 00 | 06 | 11 | 04 | 15 |
| Field Days | 15 | 315 | 06 | 321 | 121 | 00 | 121 | 04 | 02 | 06 |
| Group discussions/ meetings | 03 | 49 | 06 | 55 | 11 | 05 | 16 | 00 | 00 | 00 |
| Kisan Gosthies | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Film Shows | 17 | 279 | 36 | 315 | 73 | 11 | 84 | 03 | 01 | 04 |
| Self help group meetings | 04 | 34 | 42 | 76 | 23 | 21 | 44 | 02 | 02 | 04 |
| Mahilamandals meetings | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Kisan Melas | 02 | - | - | - | - | - | - | - | - | - |
| Exhibitions | 02 | 2520 | 280 | 2800 | 560 | 140 | 700 | 113 | 13 | 126 |
| Scientist visit to farmers fields | 356 | 360 | 41 | 401 | 154 | 18 | 172 | 00 | 00 | 00 |
| Soil health camps | 02 | 22 | 03 | 25 | 43 | 08 | 51 | 00 | 00 | 00 |
| Animal health camps | 02 | 34 | 03 | 32 | 31 | 16 | 47 | 09 | 00 | 09 |
| Plant health camps | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Farm Science Club meetings | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Ex-trainees Sammelans | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Farmers seminars | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Workshops | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| Method Demonstrations | 34 | 329 | 37 | 366 | 171 | 24 | 195 | 08 | 03 | 11 |
| Celebration of important days | 16 | 527 | 161 | 688 | 198 | 119 | 317 | 04 | 03 | 07 |
| Special day celebrations | 30 | 519 | 131 | 650 | 171 | 152 | 323 | 02 | 01 | 03 |
| Exposure visits | 05 | 161 | 05 | 166 | 39 | 03 | 42 | 00 | 00 | 00 |
| Others, Please specify  Visit to RSKs | 28 | 292 | 00 | 292 | 195 | 00 | 195 | 16 | 12 | 28 |
| **Total** | **8237** | **11270** | **1351** | **12616** | **4585** | **761** | **5346** | **310** | **148** | **458** |

**8.2 Other extension activities like print and electronic media etc.**

|  |  |  |
| --- | --- | --- |
| Sl. No. | **Type of media/activity** | **Number of activities/Number** |
| 1 | Popular articles | 04 |
| 2 | Newspaper coverage | 55 |
| 3 | Extension Literature | 15 |
| 4 | Radio Talks | 06 |
| 5 | TV Talks | 15 |
| 6 | CD/DVD/**Video** clips | 08 |
| 7 | Animal health camps (no. of animal treated) | 02 |
| 8 | Others, please specify | 00 |
|  | **Total** | **105** |

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Crop category | **Name of the crop** | **Name of the**  **Variety** | **Quantity of seed**  **(q)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
| Cereals (crop wise) |  |  |  |  |  |
| Oilseeds | Castor | ICH - 66 | 0.20 | 780-00 | - |
| Pulses | Blackgram  Greengram  Cowpea  Bengalgram  Redgram | LBG-791  KKM-3  KBC-9  BGD-103  BRG-4 | 0.50  1.02  0.36  1.50  2.42 | 4000-00  8200-00  2196-00  6000-00  13794-00 | - |
| Commercial crops |  |  |  |  |  |
| Vegetables |  |  |  |  |  |
| Flower crops |  |  |  |  |  |
| Spices | Turmeric | Alleppy Supreme, Pratibha, Pragathi &  Rajendra Sonia | 24.90 | 62250-00 |  |
| Fodder crop seeds | Multicut fodder sorghum | COFS-31 | 0.22 | 9460-00 |  |
| Fiber crops |  |  |  |  |  |
| Forest Species |  |  |  |  |  |
| Others (specify) |  |  |  |  |  |
| **Total** | **08** | **08** | **31.12** | **106680-00** |  |

**9.B. Production of hybrid seeds by the KVKs N I L**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Crop category | **Name of crop** | **Name of the**  **hybrid** | **Quantity of seed**  **(q)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Total** |  |  |  |  |  |

# 9.C. Production of planting material by the KVKs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial |  |  |  |  |  |
| Vegetable seedlings |  |  |  |  |  |
| Fruits | Papaya | Red lady | 10 | 150 | 1 |
| Ornamental plants |  |  |  |  |  |
| Medicinal and Aromatic | Chakramuni | - | 150 | 1500 | 45 |
| Plantation | Coconut  Arecanut  Drumstick  Banana Suckers | Local  Mohithnagar, Mangala  Bhagya  Yelakki and Nendran | 1070  590  1234  1500 | 107000  17700  18510  1500 | 37  22  28  1 |
| Spices | Turmeric | Prathiba | 1333 | 1333 | 1 |
| Tuber |  |  |  |  |  |
| Fodder crop saplings | Fodder | 31 different varieties | 19500 | 19500 | 41 |
| Forest Species |  |  |  |  |  |
| Others(specify) |  |  |  |  |  |
| **Total** |  |  |  |  |  |

**9. D. Production of hybrid planting materials by the KVKs N I L**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Crop category | **Name of crop** | **Name of the**  **hybrid** | **Quantity of seed**  **(q)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Total** |  |  |  |  |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bio Products** | **Name of the bio-product** | **Quantity (q)** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Bio Fertilizers |  |  |  |  |
| Bio-pesticide | Metarhizium  Paecilomyces | 7.73  11.76 | 77300.00  117600.00 | 190  243 |
| Bio-fungicide | Trichoderma  Pseudomonas  Vertricilium | 40.93  41.01  0.25 | 409300.00  410100.00  2500.00 | 682  682  25 |
| Bio Agents |  |  |  |  |
| Others (specify) |  |  |  |  |
| **Total** |  | **101.68** | **1016800.00** | **1822** |

# 9. D. Production of livestock

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particulars of Livestock | **Name of the breed** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| **Dairy animals** |  |  |  |  |
| Cows |  |  |  |  |
| Buffaloes |  |  |  |  |
| Calves |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Poultry** |  |  |  |  |
| Broilers |  |  |  |  |
| Layers |  |  |  |  |
| Duals (broiler and layer) |  |  |  |  |
| Japanese Quail |  |  |  |  |
| Turkey |  |  |  |  |
| Emu |  |  |  |  |
| Ducks |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Piggery** |  |  |  |  |
| Piglet |  |  |  |  |
| Others (Pl.specify) |  |  |  |  |
| **Fisheries** |  |  |  |  |
| Fingerlings |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Small ruminants** |  |  |  |  |
| Sheep | Banduru | 10 nos. (253.88 kg) | 90250.00 | 03 |
| **Total** |  | **10 nos. (253.88 kg)** | **90250.00** | **03** |

# 9. E. Production of Other farm produces

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | **Quantity** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Value added products |  |  |  |
| a. Processed Honey | 59.75 kg | 21510 | 139 |
| b. Ragi malt powder | 8.75 kg | 1400 | 5 |
| c. Cocoon crafts | 40 no. | 2000 | 4 |
| Fruits: |  |  |  |
| Sapota | 316.5 kg | 12660 | 52 |
| Banana | 7026.5 kg | 41840 | - |
| Papaya | 60 kg | 1200 | 15 |
| Guava | 23 kg | 575 | 11 |
| Coconut | 144 kg | 2880 | - |
| Others: |  |  |  |
| Cocoon | 125.39 kg | 50471 | Cocoon market, Mysuru |
| Earthworms | 60 kg | 27000 | 34 |
| Vermicompost | 1430 kg | 10010 | 7 |

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

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

(i) KVK Newsletter:

Date of start:\_\_\_\_\_\_\_\_\_\_\_ Periodicity:\_\_\_\_\_\_\_\_Copies printed in each issue:\_\_\_\_\_\_\_\_\_\_\_\_  **N I L**

(ii) Summary of Literature developed/published

|  |  |
| --- | --- |
| **Item** | **Number** |
| Research papers- International | - |
| Research papers- National | - |
| Technical reports | 02 |
| Technical bulletins | 15 |
| Popular articles - English | - |
| Popular articles – Local language | 13 |
| Extension literature | - |
| Others if any |  |

(iii) Details of Literature developed/published

Please provide the details of above publication in the following format:

1.       Research articles in journals: Complete citation indicating authors, year of publication, title of publication, journal name, volume and page number in sequence.

Example:

CHANDRASHEKAR.S K., BASAVAIAH., DIVYA, S.H., (2021) Economic performance and factors discriminating enterpreneurship of commercial chawki rearing centres of Karnataka, *Agri.Res. J.* **58**(2): 312-317

SUNIL, C.M., CHANDRAKALA H. AND YOGESH, G. S. (2021) Impact of Training and Demonstration on Integrated Crop Management in Transplanted paddy in Chamarajanagara District of Karnataka, India, *J. of Extn.Edu.* **32**(4):6630-6634

2.       Technical Reports/ bulletins: Authors name, Title of the technical report, name of publishing KVK, number of pages. **N I L**

Example:

Abrol I P, Dargan K S and Bhumbla D R, (1973) Reclaiming Alkali Soils, Bulletin No. 2, Central Soil Salinity Research Institute, Karnal, 58p.

1. Popular articles: Authors name, Title of the article, date of publication, Name of the newspaper/magazine, page no.

Sunil, C. M., Ground water recharge, (2021), Kannada prabaha

Yogesh, G.S., Green manuring, (2021), Aandolana

Rajath, H.P., Precautions to be lightning/thunder, (2021), Suddisanje

Sunil, C. M., Management of Parthenium, (2021), Vijaya karnataka

Sunil, C. M., Drum seeder technology in Paddy, (2021) Vijaya karnataka

Yogesh, G.S., Areca husk composting, (2021), Kannada prbaha

Example:

Santhosh H M and Ashok P, (2021) Drip irrigation system and its management, *Krishi Kamadenu,*14(2):35-39.

1. Extension literature; Authors name, month and year of publication, Title of extension literature like folders, pamphlets etc., name of publishing KVK, number of pages. **N I L**

Example:

Ravi Kand Shankar R, (2021) Sodic soil reclamation, No. 20, KVK Koppel, 4p.

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

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | **Type of media** | **Title** | **Details** |
| 1 | CD / DVD | - | - |
| 2 | Mobile Apps | - | - |
| 3 | Social media groups with KVK as Admin | Krishi Havamana | Taluk level and Hobli level whatsApp groups (56 groups - 7569 members) |
| 4 | Facebook account name | Kvk chamarajanagara | 105 friends |
| 5 | Instagram account name | - | - |
| 6 | Others if any:  **YouTube**  **Twitter** | Kvk- chamarajanagar  @KVKChamarajana1 | 401 subscribers, 12 videos uploaded  208 impressions |

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

**1. Introduction of improved, medium duration Turmeric variety IISR Prathibha for higher yield and quality in Chamarajanagara district:**

Chamarajanagara district is well known for diversified agricultural crops and varied weather situations. Turmeric, being a major spices crop is grown in more than 12000 hectare. The yield is 3.75 tonnes per hectare and is lower than state & national average. The main reasons for low yield are cultivation of low yielding varieties and lack of information pertaining to the improved, high yielding varieties.

The existing cultivar is long duration (270 – 280 days), low yielding (15 – 20 tonnes fresh rhizome/ha), with low curcumin content (2 – 3%) and has low recovery (16 – 17%). Keeping these limitations in view, ICAR KVK Chamarajanagara in collaboration with progressive turmeric growers organised and successfully conducted several extension activities for enhancing the productivity of Turmeric in the district. 8 on farm testings, 11 frontline demonstrations, 32 method demonstrations, 50 training programmes and for six seasons seed production activities have been successfully done.

As a result of these interventions, two improved varieties IISR Alleppy Supreme and IISR Prathibha were found promising for introduction in farmer’s field as the yields are higher (35 tonnes fresh rhizome per hectare) and the quality is good (processing percentage 20 and curcumin > 5%).

**Impact** – Since 2011-12, a total of 2,51,718 kg seed rhizome has been produced both at KVK farm and in turmeric grower’s field of the district. Out of this, 1,55,218 kg are IISR Prathibha seed rhizomes and 96,500 kg are IISR Alleppy Supreme seed rhizomes. Also with the co-operation of progressive farmers *viz*., Nasir Ahmed, Shivanesan, Abdul Nabeel, Manjunath and FPOs namely Udigala horticulture producers organisation, Souharda farmer producers organisation, Ankanashettypura, Kamadhenu turmeric growers association, Haradanahally, the seed rhizome production of the above said improved varieties has been successfully done and these varieties have been spread to other turmeric grower’s field of the district covering an area of 1250 acres. Apart from this, nearly 150 turmeric growers have been enabled with suitable extension activities as successful turmeric seed producers.

**Seed production details (kg)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Particulars** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | **2018-19** | **2019-20** | **2020-21** | **Total** |
| KVK Farm | 300 | 1136 | 2830 | 2442 | 1000 | 3200 | 3500 | 3000 | 3000 | 3000 | 23408 |
| Kamadhenu turmeric growers association, Haradanahally | 00 | 00 | 00 | 00 | 2000 | 4000 | 4800 | 6200 | 7000 | 7400 | 31400 |
| OFT/FLD farmers | 00 | 2500 | 5000 | 6200 | 6200 | 6200 | 6200 | 6200 | 6200 | 7000 | 51700 |
| Other farmers | 00 | 200 | 1000 | 6000 | 10000 | 15000 | 22000 | 23000 | 34000 | 43000 | 145210 |
| **Total** |  |  |  |  |  |  |  |  |  |  | **251718** |

During 2021-22, spices board sponsored FPO Souharda farmer producers organisation, Ankanashettypura has procured seed rhizomes of IISR Prathibha from turmeric seed producers of the district and has distributed to 343 farmer members covering an area of 175 acres. These improved varieties are being promoted in the line department activities in the district under sustainable turmeric seed rhizome production programmes. These improved variety seed rhizomes have also been provided to growers of Mysore, Bagalkot, Bangalore Rural, Chikmagalur, Coorg, Mandya districts for around 25 acres area. As a result of all the extension activities, farmers are now getting good quality seed rhizomes of these improved varieties and now farmers are demanding short duration turmeric varieties.

**2. Management of Paddy in problematic soils**

Paddy is the major cereal crop of Chamarajanagar district that has been cultivated in the command area of Kollegal & Yalandur taluk. Also it is grown as an irrigated crop in parts of Chamarajanagar taluk. The area under paddy in the district is 13186 ha with a production and productivity of 70114 tonnes and 4780 kg/ha, respectively. The addressing issues here are the problematic soils, susceptible local variety, poor management practices (particularly nutrient management) and the pest-disease incidence. The area under problematic soils in the district is around 11.58% of the total cultivable area (source: NBSS&LUP, regional centre, Bangalore).

Through the participatory rural appraisal approach, it was found that the poor management practices and cultivation of susceptible variety (not suitable for salt affected soil and susceptible to blast disease) are the major problems in the command area.

**Production constraints**

* Cultivation of unsuitable variety (IR 64, poor performance under salt affected soil)
* Poor agronomic practices – no soil testing, no gypsum application, no drainage provisioning, imbalanced manuring practices (organic and inorganic manures)

With this background, interventions for enhancing the paddy productivity were initiated during 2012-13 with the introduction of salt tolerant variety IR 30864 (source: UAS,B).

**Details of extension activities carried out**

|  |  |  |
| --- | --- | --- |
| **Year** | **Intervention** | **Number of farmers** |
| 2013-14 | On farm testing – 01  Trainings – 03  Method demonstrations - 02 | 91 |
| 2014-15 | On farm testing – 01  Farmers field school - 01  Trainings – 03  Method demonstrations – 02  Manual - 01 | 253 |
| 2015-16 | On farm testing – 01  Trainings – 05  Method demonstrations - 03 | 60 |
| 2016-17 | Frontline demonstration – 01  Trainings – 02  Field day - 01  Method demonstrations - 03 | 149 |
| 2017-18 | Frontline demonstration – 01  Trainings – 02  Field day - 01 | 96 |

During 2018-19, the horizontal expansion was 28.4 ha accounting to 1775 kg seeds that were supplied by farmers themselves. In the same year this variety was endorsed by UAS Bangalore for cultivation in maidan areas of Cauvery command which has enabled good quality seed supply to the paddy growers. The seed distribution details by Seed unit, UAS, V.C.Farm, Mandya are as follows:

|  |  |  |
| --- | --- | --- |
| **Year** | **Certified seeds distributed (Q)** | **Area (ha)** |
| 2018-19 | 23.4 | 62.4 |
| 2019-20 | 66.03 | 176.08 |
| 2020-21 | 183.03 | 488.08 |
| 2021-22 | 136.15 | 363.07 |

Also due to the various extension activities conducted, the impact could be seen in the following particulars distributed in the district through development departments.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2017-18** | **2018-19** | **2019-20** | **2020-21** |
| Green manure seeds (q) | 145 | 157 | 494 | 658 |
| Gypsum (tonnes) | 260 | 308 | 426 | 110  (due to shortage of funds for department) |

**3. Introduction of yellow mosaic tolerant Greengram variety KKM-3**

**Production constraints:** Chamarajanagar district is known for its varied agro-climatic conditions with diversified cropping situation. Among different pulses grown in district, green gram and black gram occupies major area. The productivity of green gram of state is 247 kg ha-1. Whereas, the district productivity is 189 kg ha-1. The major reasons for the lower productivity of green gram are erratic rainfall, cultivation of crops under poor and marginal lands, broadcasting of seeds, local varieties, non-availability of season based quality seeds resulting in increased pest and disease incidence particularly yellow mosaic virus, no seed treatment with bio-fertilizers (Rhizobium and PSB), not practicing application of micronutrients, Poor management of pests and diseases.

To address these issues KVK, Chamarajanagar intervened since from 2017- 18 to till date to improve the production and productivity of the crops by taking several participatory research and extension activities viz., Front line demonstrations (50 No’s), method demonstrations (15 No’s), training programmes (15 No’s) in K. Mookkalli, Sappayyanapura, Hanahalli, Kotamballi, Taggaluru, doddatuppuru and Bettadahalli villages of Chamarajanagar district of Karnataka during pre-kharif and late kharif season under rainfed condition.

**Technologies introduced:** The package of improved technologies like line sowing, integrated nutrient management includes micro nutrient application (Zinc sulphate), seed treatment with systemic insecticides, Rhizobium and PSB and whole package were demonstrated. Greengram variety KKM-3 (Karnataka Kathalagere Moong 3) is a short duration (60-65 days) and improved green gram variety released from ARS, Kathalagere and Karnataka during 2009 having yield potential of 7.5-8 q ha-1 under rainfed condition with a moderately tolerant to Yellow Mosaic Virus and Powdery Mildew disease and also for Pod borer was also introduced.

The study revealed that the demonstrated technology recorded a mean yield of 545.5 kg/ha which was 182.1 % higher than obtained with farmers’ practice (193.3 kg/ha). Higher Benefit: Cost ratio of 1.38 was obtained with improved technologies. Whereas, it was 0.52 in case of farmers’ practices (Table-1 & 2).Data pertaining to technological gap, extension gap and technological index are depicted in Table 3. The technology gap, the gap in the demonstration yield over potential yield ranged from 188 to 215 kg/ha respectively. An extension gap of 355 kg/ha was recorded. Whereas, the highest extension gap of 399 kg/ha was observed during 2018-19. The technology index was 26.87 percent.

**Table 1. Seed yield of greengram as affected by improved and farmer practices in farmers’ fields**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Year** | **Area (ha)** | **No. of Farmers** | **Seed yield (q/ha)** | | **Additional yield over farmers practice (kg/ha)** | **% increase over check** | **Per cent Yellow mosaic incidence** | |
| **Improved Technologies** | **Farmers Practices** | **Improved Technologies** | **Farmers Practices** |
| 1 | 2018-19 | 4.0 | 10 | 5.62 | 1.63 | 3.99 | 244.7 | 7.0 | 97.0 |
| 2 | 2019-20 | 16.0 | 40 | 5.35 | 2.24 | 3.11 | 138.8 | 0.0 | 21.3 |
| **Average** | | | | **5.49** | **1.94** | **3.55** | **191.8** | **3.50** | **59.2** |

**Table 2. Economics of frontline demonstrations on greengram in farmers’ field**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Year** | **Cost of Cultivation (Rs./ha)** | | **Gross returns (Rs./ha)** | | **Net returns (Rs./ha)** | | **B:C Ratio** | |
| **IT** | **FP** | **IT** | **FP** | **IT** | **FP** | **IT** | **FP** |
| 1 | 2018-19 | 26360 | 24975 | 38764 | 7313 | 12404 | -17662 | 1.47 | 0.29 |
| 2 | 2019-20 | 25008 | 21975 | 36676 | 15792 | 11668 | -5183 | 1.46 | 0.75 |
| **Average** | | 25684 | 23475 | 37720 | 11553 | 12036 | -11423 | 1.46 | 0.52 |

**Note:** IT-Improved Technologies, FP- Farmers practise

**Table 3. Technological gap analysis of frontline demonstrations on greengram in farmers’ field**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Year** | **Area (ha)** | **Technology Gap (q/ha)** | **Extension Gap (q/ha)** | **Technology Index (%)** |
|
| 1 | 2018-19 | 4.0 | 188 | 399 | 25.06 |
| 2 | 2019-20 | 16.0 | 215 | 311 | 28.67 |
| **Average** | | | 202 | 355 | 26.87 |

****

**Demonstration plot Free of disease** **Farmers plot with full of disease**

**4. Demonstration of improved high yielding wilt resistance variety JAKI-9218 and ICM practices in Chickpea**

|  |  |  |
| --- | --- | --- |
| **Crop** | Chickpea | |
| **Major problems** | Low yield due to use of local varieties & non-certified seeds  Incidence of wilt  20-30% yield loss due to pod borer | |
| **Technology/ thrust areas** | * Introduction of Chickpea variety JAKI-9218 (Resistant to wilt, root rot & color rot) * Rhizobium @ 500 g/ha * PSB @ 500 g/ha * Trichoderma @ 500 g/ha * Application of zinc sulphate @ 10 kg/ha * Application of borax @ 5 kg/ha * Foliar spray of DAP @ 2% * Use of bird perches (37 nos) * Spraying of Profenophos @ (2 ml/l) * Spraying of Indoxacarb @ (0.3 ml/l) | |
| **Interventions** | **CFLD under NFSM** | Integrated crop management in Chickpea |
| **Training** | Off and On campus training programmes (19 Nos) on ICM and seed production technologies. |
| **Extension Activities** | Folders and Technical bulletins were distributed. Field visits (62 nos.), Field Days (5 Nos.) |
| **Coverage** | **Area (ha)** | 130 |
| **No. Farmers** | 325 |
| **Output** | **Vertical spread** | Productivity increased from 10.71 q/ha to 14.70 q/ha (37.56 %) |
| **Horizontal spread** | 73.6 % of area (1568 ha) has brought under Jaki-9218 variety in the district |
| **Additional net returns (Rs/ha)** | Rs.12,312/- |
| **Outcome** | * Jaki-9218 has replaced the native variety since it is short duration variety, wilt and drought tolerant as compared to farmers practise. * Adoption of IPDM packages reduced the No. of sprays, incidence of pod borer and wilt * Quality Seed production of 150 q was done by farmers during (2020-21). | |



**Field day on Chickpea variety JAKI-9218**

**5. Title: Introduction of yellow mosaic virus disease tolerant and photo insensitive blackgram variety LBG-791 and ICM practices.**

|  |  |  |
| --- | --- | --- |
| **Crop** | Blackgram | |
| **Major problems** | * 80-90 % yield loss due to severe yellow mosaic virus disease * Photo sensitivity | |
| **Thrust areas** | Introduction of yellow mosaic virus disease tolerant and photo insensitive variety | |
| **Interventions** | **OFT** | On farm testing was conducted and LBG-791 variety was found tolerant to yellow mosaic virus disease and photo insensitive. Further up scaled to FLD. |
| **FLD** | Demonstration of blackgram Variety LBG-791 with ICM technologies |
| **Training** | Off and On campus training programmes (6 Nos.)on ICM and seed production technologies. |
| **Extension Activities** | Folders published and distributed. Field visits (42 nos.), Field Days (3 Nos.) |
| **Coverage** | **Area (ha)** | 8 ha |
| **No. Farmers** | 20 |
| **Output** | **Vertical spread** | Under rainfed condition productivity has increased from 3.78 q/ha to 7.40 q/ha (95.7 %) |
| **Horizontal spread** | As it is a new variety, It has expanded in an area of 32 ha of district. A seed indent of 180 q for an area of 1440 ha has been given by state agricultural department of district for next season. |
| **Additional net returns (Rs/ha)** | Rs.23,510/- |
| **Outcome** | * LBG-791 variety has shown tolerance to yellow mosaic virus disease and was found photo insensitive as compared to farmers practise. * LBG-791 has been released for Zone-6 of Karnataka in collaboration with AICRP on pulses, ZARS, Mandya during 2019-20. * Quality Seed production of 25 q was done by farmers during (2020-21) which has made the farmers to get extra income. | |

****

**Demonstration plot Free of disease Farmers plot with full of disease**

**6. Title: Demonstration of terminal drought tollerant short duration Sunflower hybrid KBSH-78 with ICM practices.**

|  |  |  |
| --- | --- | --- |
| **Crop** | Sunflower | |
| **Major problems** | * Mid season / Terminal drought * Non availability of suitable high yielding varieties * Non adoption of line sowing and intercultural operation * Poor nutrient management * Lack of knowledge on pest and disease management | |
| **Thrust areas/Technologies** | * Introduction of short duration hybrid KBSH 78 and line sowing * Seed hardening and Seed treatment with biofertilizer *viz.,* Azotobacter @ 500g/ha each) * Application of Zinc sulphate (10kg/ha) and Borax (15 kg/ha). * Application of need based plant protection chemicals * Supplementary pollination techniques | |
| **Interventions** | **FLD** | Demonstration of Sunflower hybrid KBSH-78 with ICM technologies |
| **Training** | Off and On campus training programmes (8 Nos.) on Integrated crop management technologies |
| **Extension Activities** | Folders published and distributed. Field visits (27 nos.), Field Days (4 Nos.) |
| **Coverage** | **Area (ha)** | 8 ha |
| **No. Farmers** | 20 |
| **Output** | **Vertical spread** | Under rainfed condition productivity has increased from 3.02 q/ha to 10.0 q/ha (231.1 %) |
| **Horizontal spread** | As it is a new variety, It has expanded in an area of 130 ha of district and seed indent for 1000 ha has been given for next season by state agricultural department of district. |
| **Additional net returns (Rs/ha)** | Rs.23641/- |
| **Outcome** | KBSH-78 sunflower hybrid is a short duration in nature which has helped in escaping the terminal drought under rainfed conditions of the district. This character has made variety to popularize among the farmers. | |

****

**Demonstration plot Farmers Plot Head comparision**

**7. Title: Demonstration of multicut fodder sorghum CoFS-29 well suitable for rainfed condition:**

|  |  |  |
| --- | --- | --- |
| **Crop** | Multicut fodder sorghum | |
| **Major problems** | * Existing varieties are of single cut type and Low yielding * Scarcity of green fodder under rainfed condition * Less milk yield withlow quality . | |
| **Thrust areas/Technologies** | * Introduction of multicut Fodder Sorghum (CoFS-29) under rainfed conditions * Increasing the milk yield and its quality under rainfed conditions | |
| **Interventions** | **FLD** | Demonstration of CoFS-29 with ICM technologies |
| **Training** | Off and On campus training programmes (20 Nos.) on ICM and silage preparation and urea enrichment for maize and jowar stovers. |
| **Extension Activities** | Folders published and distributed. Field visits (41 nos.), Field Days (3 Nos.) |
| **Coverage** | **Area (ha)** | 50 ha |
| **No. Farmers** | 500 |
| **Output** | **Vertical spread** | Under rainfed condition productivity has increased from 11.2 t/ha to 16.08 t/ha (43.57 %) |
|  | **Horizontal spread** | It has expanded in an area of 65 ha of district |
| **Outcome** | * CoFS-29 has recorded good yield under rainfed conditions of the district. * Green fodder was made available throughout the year by giving life saving irrigation as it is drought tolerant. * Stem girth was thin and juicy, since palatability was more. * Increase in milk yield by 0.75-1.25 litres was observed. | |

****

**Field day celebration of CoFS-29**

**8. Title: Demonstration of MAH-14-5 maize hybrid with ICM technologies**

|  |  |  |
| --- | --- | --- |
| **Crop** | Maize | |
| **Major problems** | * Low yield due to use of local and private varieties * Non application of potash and micronutrients. * Labour scarcity for timely weeding. * Lack of Knowledge on pest and disease management | |
| **Thrust areas/Technologies** | * Introduction of hybrid Maize MAH-14-5. * Seed treatment with biofertilizer (Azospirillum and PSB @ 500g/ha each) * Application of potassium @ 40 kg/ha * Application of Zinc sulphate (10kg/ha) * Application of pre emergence herbicide Atrazine @ 1 kg a.i. /ha * Application of need based plant protection chemicals | |
| **Interventions** | **FLD** | Demonstration of MAH-14-5 maize hybrid with ICM technologies |
| **Training** | Off and On campus training programmes (8 Nos.) on ICM technologies and hybrid seed production technologies to farmers. |
| **Extension Activities** | Folders published and distributed. Field visits (41 nos.), Field Days (3 Nos.) |
| **Coverage** | **Area (ha)** | 50 ha |
| **No. Farmers** | 125 |
| **Output** | **Vertical spread** | Under rainfed condition productivity has increased from 63.6 q/ha to 77.45 q/ha (21.77 %) |
| **Horizontal spread** | 5.24 % of area (120 ha) has brought under MAH-14-5 hybrid in the district. |
| **Additional net returns (Rs/ha)** | Rs.26,845/- |
| **Outcome** | * The girth of the MAH-14-5 cob was bigger in size and completely filled due to application of Zinc Sulphate. * The stovers were stay green even though at harvest and was suitable for green fodder and reduced the scarcity for fodder during lean period. * By practicing IPM incidence of fall army worm was reduced and hybrid has shown tolerance to Tursicum leaf blight in turn reduced the cost on chemicals.. * Reduction in weed management cost by 2000-2200 was realized. * In collaboration with AICRP on Maize, ZARS, Mandya, the farmers were involved in hybrid maize seed production to meet the district seed requirement and produced 42.0 quintals of certified hybrid seeds. | |

****

**Demonstration plot Farmers Plot Cob comparision**

**10.D. Give details of Innovative Methodology or Innovative Approach of Transfer of Technology developed and used during the year N I L**

10.E. Give details of Indigenous Technical Knowledge practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs) N I L

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Crop / Enterprise** | **ITK Practiced** | **Purpose of ITK** | **Scientific Rationale** |
|  |  |  |  |  |

10 F. Technology Week celebration: **N I L**

Period of observing Technology Week: From to

Total number of farmers visited :

Total number of agencies involved :

Number of demonstrations visited by the farmers within KVK campus :

**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 Practicals |  |  |  |
| Supply of Literature (No.) |  |  |  |
| 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 |  |  |  |

**10 E. Recognition and Awards:** Please give details about National and State level recognition and awards **N I L**

**PART XI – SOIL AND WATER TEST**

**11.1 Soil and Water Testing Laboratory**

A. Status of establishment of Lab

1. Year of establishment : 2011-12

2. List of equipments purchased with amount : N I L

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl. No | Name of the Equipment | Qty. | Cost | Status |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| Total | |  |  |  |

B. Details of samples analyzed since establishment of SWTL:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
| Soil Samples | 8366 | 6085 | 756 | 922700 |
| Water Samples | 5637 | 5627 | 599 | 545900 |
| Plant samples | 00 | 00 | 00 | 00 |
| Manure samples | 00 | 00 | 00 | 00 |
| Others (specify) | 00 | 00 | 00 | 00 |
| Total | 14003 | 12106 | 1355 | 1468600 |

C. Details of samples analyzed during 2021:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
| Soil Samples | 543 | 435 | 265 | 140400 |
| Water Samples | 137 | 127 | 104 | 27400 |
| Plant samples | 00 | 00 | 00 | 00 |
| Manure samples | 00 | 00 | 00 | 00 |
| Others (specify) | 00 | 00 | 00 | 00 |
| Total | 680 | 562 | 369 | 167800 |

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

|  |  |  |
| --- | --- | --- |
| Mobile Kits | Date of purchase | Current status |
| 1. PUSA STFR | 18.12.2016 | NOT WORKING |
| 2. Mridapareekshak | 30.03.2017 | NOT WORKING |

B. Details of soil samples analyzed during 2021 and since establishment with Mobile Soil Testing Kit:

|  |  |  |  |
| --- | --- | --- | --- |
|  | During 2020 | During 2021 | Cumulative progress (Total) |
| Samples analyzed (No.) | NIL | NIL | Pusa STFR: 300 samples  Mridapareekshak: 100 samples |
| Farmers benefited (No.) | NIL | NIL | 400 |
| Villages covered (No.) | NIL | NIL | 05 |

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | Date (s) | Villages (No.) | Farmers (No.) | Samples analyzed (No.) | Soil health cards issued (No.) |
| SWTL | - | - | 435 | 543 | 543 |
| Mobile Soil Testing Kit | - | - | - | - | - |

11.4 World Soil Health Day celebration

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Farmers participated (No.) | Soil health cards issued (No.) | VIPs (MP/ Minister/MLA attended (No.) | Other Public Representatives participated | Officials participated (No.) | Media coverage (No.) |
| 1 | 46 | 46 | - | - | - | 1 |

**PART XII. IMPACT**

**12.A. Impact of KVK activities (Not restricted for reporting period).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of specific technology/skill transferred** | **No. of participants** | **% of adoption** | **Change in income (Rs.)** | |
| **Before (Rs./Unit)** | **After (Rs./Unit)** |
| Demonstration of Blackgram variety LBG-791 | 120 | 38.33 | 3600 | 9100 |
| Demonstration of Ragi variety KMR-630 | 80 | 28.75 | 7300 | 11400 |
| Demonstration of Chickpea variety BGD-103 | 120 | 31.00 | 32900 | 43100 |
| Demonstration of Drum Seeded Rice | 36 | 55.55 | 33000 | 55400 |
| Popularization short duration improved Turmeric variety IISR Pragathi | 120 | 41.66 | 183900 | 417700 |
| Demonstration of IPM practices for management of leaf roller in Mulberry | 62 | 32.25 | 77500 | 152600 |
| Scaling up of improved silkworm hybrid FC-1 X FC-2 | 60 | 33.33 | 21600 | 41700 |
| Demonstration on Samruddhi (JHA Technology) for enhanced cocoon / silk production | 50 | 30.00 | 23100 | 43700 |

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

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

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

**PART XIII - LINKAGES**

**13A. Functional linkage with different organizations**

|  |  |
| --- | --- |
| **Name of organization** | **Nature of linkage** |
| State Department of Agriculture, Chamarajanagar District | Conducting training programme, Front line Demonstration, joint diagnostic team, bimonthly technical workshop, joint diagnostic survey |
| NABARD, Chamarajanagara | Conducting training programmes, large scale demonstrations, funded for projects |
| Watershed Department, Chamarajanagar | Conducting training programme , joint diagnostic survey |
| State Department of Horticulture, Chamarajanagar District | Conducting Training Programme, joint diagnostic survey |
| State Department of fisheries, Chamarajanagar District | Technical Information |
| State Department of Animal Husbandry and Veterinary Sciences | Technical Information, animal health camp training extension staff , joint diagnostic survey |
| Bio fertilizer Division, Department of Microbiology, UAS, Bangalore | Supplying bio fertilizer and Technical Information |
| State Dept. of Sericulture | Conducting training programme, Front line Demonstration, joint diagnostic team, bimonthly technical workshop, joint diagnostic survey |
| Regional sericulture research station | Conducting training programme, Front line Demonstration, joint diagnostic team, bimonthly technical workshop, joint diagnostic survey |
| Gram Panchayath of all taluk of Chamarajanagar District | Conducting training programme |
| Myrada, Chamarajanagar District | Conducting training programme |
| Sahakara Mandali, Chamarajanagar | Supplying Fertilizer Plant protection chemical seeds and other input at reasonable rate on credit basis |
| Woman self help groups of Chamarajanagar District | Conducting training programme and Demonstrations and farm fields |
| Zilla Panchayat, Chamarajanagar | Research project on Betelvine |
| NGO’s--Mahila samakhya, Mobility India, Sneha | For conducting training programmes and and demonstration |

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the scheme** | **Date/ Month of initiation** | **Funding agency** | **Amount (Rs.)** |
|  |  |  |  |

**13C. Details of linkage with ATMA**

**Coordination activities between KVK and ATMA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Programme** | **Particulars** | **No. of programmes attended by KVK staff** | **No. of programmes Organized by KVK** | **Other remarks (if any)** |
| **01** | **Meetings** | Bimonthly meetings | 02 | 01 |  |
| **02** | **Research projects** | 00 | 00 | 00 |  |
|  |  |  |  |  |  |
| **03** | **Training programmes** | ICM in Blackgram, IPDM in Maize & Soil organic carbon sequestration | 04 | 05 |  |
|  |  |  |  |  |  |
| **04** | **Demonstrations** | Seed treatment: foliar application of micro nutrient mixture | 00 | 07 |  |
|  |  |  |  |  |  |
| **05** | **Extension Programmes** |  |  |  |  |
|  | Kisan Mela | 00 | 00 | 00 |  |
|  | Technology Week | 00 | 00 | 00 |  |
|  | Exposure visit | To krishi mela @ VC farm, Mandya | 02 | 01 |  |
|  | Exhibition | 00 | 00 | 00 |  |
|  | Soil health camps | K. Gundapura village | 01 | 01 |  |
|  | Animal Health Campaigns | 00 | 00 | 00 |  |
|  | Others (Pl. specify) | 00 | 00 | 00 |  |
| **06** | **Publications** |  |  |  |  |
|  | Video Films |  |  |  |  |
|  | Books |  |  |  |  |
|  | Extension Literature |  |  |  |  |
|  | Pamphlets |  |  |  |  |
|  | Others (Pl. specify) |  |  |  |  |
| **07** | **Other Activities** (Pl.specify) |  |  |  |  |
|  | Watershed approach |  |  |  |  |
|  | Integrated Farm Development |  |  |  |  |
|  | Agri-preneurs development |  |  |  |  |
|  |  |  |  |  |  |

**13D. Give details of programmes implemented under National Horticultural Mission N I L**

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

**13E. Nature of linkage with National Fisheries Development Board N I L**

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

**13F. Details of linkage with RKVY N I L**

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

**13G. Kisan Mobile Advisory Services**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Month** | **No of Advisories** | **Message type (Text/Voice)** | **SMS/voice calls sent (No.)** | | | | | | **Total SMS/Voice calls sent (No.)** | **Farmers benefitted (No.)** |
| **Crop** | **Livestock** | **Weather** | **Marketing** | **Awareness** | **Other enterprises** |
| January | 3 | Text | 1 | 0 | 2 | 0 | 0 | 0 | 3 | 37514 |
| February | 3 | Text | 2 | 0 | 1 | 0 | 0 | 0 | 3 | 37516 |
| March | 3 | Text | 0 | 0 | 2 | 0 | 1 | 0 | 3 | 37523 |
| April | 1 | Text | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 37531 |
| May | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| June | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| July | 1 | Text | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 37534 |
| August | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| September | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| October | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| November | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| December | 0 | Text | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **11** | Text | **5** | **0** | **6** | **0** | **1** | **0** | **11** | **37534** |

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

**14A. 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 |
|  |  |  |  |  |  |  |  |  |  |

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name**  **of the crop** | **Date of sowing** | **Date of harvest** | **Area (ha)** | **Details of production** | | | **Amount (Rs.)** | | **Remarks** |
| **Variety** | **Type of Produce** | **Qty.** | **Cost of inputs** | **Gross income** |
| **Cereals** |  |  |  |  |  |  |  |  |  |
| Ragi | 13.09.2021 | 06.12.2021 | 0.8 | KMR-630 | Foundation seed | 6.64 q | 12000 | 31000 |  |
| **Pulses** |  |  |  |  |  |  |  |  |  |
| Greengram | 18.05.2021 | 06.08.2021 | 0.4 | KKM-3 | Foundation seed | 1.02 q | 3600 | 8200 |  |
| Blackgram | 08.07.2021 | 03.10.2021 | 0.40 | LBG-791 | Foundation seed | 0.50 q | 1500 | 4000 |  |
| Cowpea | 13.09.2021 | 06.12.2021 | 0.40 | KBC-9 | Foundation seed | 0.36 q | 1300 | 2196 |  |
| Redgram | 08.07.2021 | 28.01.2022 | 0.80 | BRG-4 | Foundation seed | 2.42 q | 4800 | 13790 |  |
| **Oilseeds** |  |  |  |  |  |  |  |  |  |
| Castor | 01.07.2021 | 05.10.2021 | 0.40 | ICH-66 | Foundation seed | 0.20 q | 1000 | 4000 |  |
| **Fibers** |  |  |  |  |  |  |  |  |  |
| NIL |  |  |  |  |  |  |  |  |  |
| **Spices & Plantation crops** | | | | | | | | | |
| Turmeric | 27.04.2021 | 18.02.2022 | 0.40 | Alleppy supreme, Prathiba, Pragathi and Rajendra sonia | Truthfully label seeds | 24.90 q | 23000 | 60000 |  |
| **Floriculture** |  |  |  |  |  |  |  |  |  |
| NIL |  |  |  |  |  |  |  |  |  |
| **Fruits** |  |  |  |  |  |  |  |  |  |
| Banana | 04.04.2021 | - | - | - | - | - | - | - |  |
|  |  |  |  |  |  |  |  |  |  |
| **Vegetables** |  |  |  |  |  |  |  |  |  |
| NIL |  |  |  |  |  |  |  |  |  |
| Others (specify) | | | | | | | | | |
| Mulberry | 26.06.2021 | 30.09.2021 | 0.40 | V-1 | Truthfully label seeds | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |

**14C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl.  No. | Name of the Product | Qty | Amount (Rs.) | | Remarks |
| Cost of inputs | Gross income |
| 1 | Pseudomonas | 4101 kg | 102525 | 410100 | NIL |
| 2 | Trichoderma | 4093 kg | 102325 | 409300 |
| 3 | Verticillium | 25 ltr. | 625 | 2500 |
| 4 | Metarhizium | 773 ltr. | 18075 | 77300 |
| 5 | Peciliomyces | 1176 ltr. | 29400 | 117600 |

**14D. Performance of instructional farm (livestock and fisheries production) N I L**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No | Name  of the animal / bird / aquatics | Details of production | | | Amount (Rs.) | | Remarks |
| Breed | Type of Produce | Qty. | Cost of inputs | Gross income |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**14E. Utilization of hostel facilities N I L**

Accommodation available (No. of beds)

|  |  |  |  |
| --- | --- | --- | --- |
| **Months** | **No. of trainees stayed** | **Trainee days (days stayed)** | **Reason for short fall (if any)** |
| January |  |  |  |
| February |  |  |  |
| March |  |  |  |
| April |  |  |  |
| May |  |  |  |
| June |  |  |  |
| July |  |  |  |
| August |  |  |  |
| September |  |  |  |
| October |  |  |  |
| November |  |  |  |
| December |  |  |  |

**14F. Database management**

|  |  |  |
| --- | --- | --- |
| **S.No** | **Database target** | **Database created** |
| **1** | **Farmers data Base - 50000** | **40181** |

**14G. Details on Rain Water Harvesting Structure and micro-irrigation system N I L**

1. **Rain Water Harvesting Structure**

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

1. **Micro-irrigation systems**

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

**PART XV – SPECIAL PROGRAMMES**

**15.1 Paramparagath Krishi Vikas Yojana (PKVY) N I L**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl No. | Name of cluster village | Initial soil fertility status (Average of cluster village) | | | | Facilities created for organic source of manure | Name of Crops cultivated | Variety | Organic inputs applied including bio-agents and botanicals treatment | Yield (q/ha) | Economics | |
| Aval. N | Aval. P | Aval. K | OC % | Cost of cultivation (Rs/ha) | Net returns (Rs/ha) |
| 1 | 1. |  |  |  |  |  |  |  |  |  |  |  |
|  | 2. |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 1. |  |  |  |  |  |  |  |  |  |  |  |
|  | 2. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

**15.2 District Agriculture Meteorological Unit (DAMU)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Agro advisories | | | Farmers awareness programmes | |
| Sl No. | No of Agro advisories generated | No of farmers registered for agro advisories | No of farmers benefitted | No of programmes | No of farmers benefitted |
| 1 | 108 | 47828 | 47828 | 28 | 917 |

**15.3 Fertilizer awareness programme organised:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **State** | **Name of KVK** | **Details of Activities / programme Organised** | **Number of Chief Guests** | **No. of Farmers attended program** | **Total participants** |
| Karnataka | Chamarajanagara | DBT in fertilizers: awareness week under Azadka Amrith Mahothsav | 01 | 40 | 41 |

**15.4 Seed Hub N I L**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Crops*** | ***Variety*** | ***Year of release*** | ***Production*** | | | | ***No of farmers benefited/Sold to no. of farmers*** | ***Quantity seed sold (q)*** |
| ***Target (q)*** | ***Area (ha.)*** | ***Actual Production***  ***(q)*** | ***Category***  ***(FS/CS)*** |
|  |  |  |  |  |  |  |  |  |

**15.5 CFLD on Oilseeds: NIL**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Crop** | **Varieties demonstrated and check** | **Allocated** | | **Implemented** | |
| **Area (ha)** | **Demos (No.)** | **Area (ha)** | **Demos (No.)** |
|  |  |  |  |  |  |  |
|  | Total |  |  |  |  |  |

**15.6 CFLDs on Pulses:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl.No.** | **Crop** | **Varieties demonstrated and check** | **Allocated** | | **Implemented** | |
| **Area (ha)** | **Demos (No.)** | **Area (ha)** | **Demos (No.)** |
| 1 | Chickpea | Jaki-9218 (Demo)  JG-11 (Check) | 22 | 55 | 22 | 55 |
| **Total** | | | **22** | **55** | **22** | **55** |

**15.7 Krishi Kalyan Abhiyan (Aspirational districts) N I L**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity** | **Date(s) conducted** | **No. of farmers (General)** | | | **No. of farmers**  **SC / ST** | | | **No.of extension personnel** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
|  |  |  |  |  |  |  |  |  |  |  |

**15.8 Micro-Irrigation N I L**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity** | **Date(s) conducted** | **No. of farmers (General)** | | | **No. of farmers**  **SC / ST** | | | **No. of extension personnel** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
|  |  |  |  |  |  |  |  |  |  |  |

**15.9 Tribal Sub-Plan (TSP) N I L**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Farmer Training | | Women Farmer Training | | Rural Youths | | Extension Personnel | | OFT (No of Technologiess) | Number of farmers involved | | | Participants in extension activities (No.) | Production of seed (q) | Production of Planting material (Number in lakh) | Production of Livestock strains (Number in lakh) | Production of fingerlings (Number in lakh) | Testing of Soil, water, plant, manures samples (Number) |
| No. of Trainings/Demos | No. of Farmers | No. of Trainings/Demos | No. of Women Farmers | No. of Trainings/Demos | No. of Youths | No. of Trainings/Demos | No. of Ext. Person | On- farm trials | Frontline demos | Mobile agro- advisory to farmers |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**15.10 SCSP**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Farmer Training** | | **Women Farmer Training** | | **Rural Youths** | | **Extension Personnel** | | **OFT (No of Technologiess)** | **Number of farmers involved** | | | **Participants in extension activities (No.)** | **Production of seed (q)** | **Production of Planting material (Number in lakh)** | **Production of Livestock strains (Number in lakh)** | **Production of fingerlings (Number in lakh)** | **Testing of Soil, water, plant, manures samples (Number)** |
| **No. of Trainings/Demos** | **No. of Farmers** | **No. of Trainings/Demos** | **No. of Women Farmers** | **No. of Trainings/Demos** | **No. of Youths** | **No. of Trainings/Demos** | **No. of Ext. Person** | **On- farm trials** | **Frontline demos** | **Mobile agro- advisory to farmers** |
| 09 | 455 | 1 | 30 | - | - | - | - | - | - | - | 110 | 461 | - | - | - | - | 40 |

**15.11 NARI**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Achievement** | |
| **Number of activity** | **No. of farmers/ beneficiaries** |
| OFTs – Nutritional Garden (activity in no. of Unit) | - |  |
| OFTs – Bio-fortified Crops (activity in no. of Unit) |  |  |
| OFTs – Value addition(activity in no. of Unit/Enterprise) |  |  |
| OFTs - Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise) |  |  |
| FLDs – Nutritional Garden (activity in no. of Unit) | **30** | **30** |
| FLDs – Bio-fortified Crops (activity in no. of Unit) |  |  |
| FLDs – Value addition(activity in no. of Unit/Enterprise) |  |  |
| FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise) |  |  |
| Trainings | **7** | **247** |
| Extension Activities | **9** | **311** |

**15.12 KVK Portal**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No. of Events added by KVKs** | **No. of Facilities added by KVKs** | **Filled Report on Package of Practices (Y/N)** | | | | **Filled Profile Report (Y/N)** | | | | | | | |
| **Crop** | **Livestock** | **Fisheries** | **Horticulture** | **Employees** | **Posts** | **Finance** | **Soil Health Cards** | **Appliances** | **Crops** | **Resources** | **Fish** |
| 118 | 14 | 03 | 01 | 00 | 02 | Y | Y | Y | Y | Y | Y | Y | N |

**15.13 KSHAMTA N I L**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Adopted Villages** | **No. of Activities** | | **No. of farmers benefited** | |
| **Demo** | **Training** | **Demo** | **Training** |
|  |  |  |  |  |

**15.14 DFI**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl** | **District** | **Taluks** | **Villages** | **Farmers (No.)** | **Average Benchmark Income (Rs/year)** | **Crops/ enterprises** | **KVK Interventions** | **Additional Net Income generated due to KVK interventions (Rs/year)** | **Total income of farmer (Rs/year)** |
| 1 | Chamarajanagara | Chamarajanagara | Kotamballi | 10 | 12,531 | Blackgram | ICM | 10123 | 43109 |
| 2 | Chamarajanagara | Chamarajanagara | K Mookahalli | 10 | 12,531 | Bengalgram | ICM | 21441 | 64550 |
| 3 | Chamarajanagara | Kollegala | Hosapalaya | 10 | 3,80,000 | Turmeric | ICM | 64331.5 | 417716 |

**PART XVI - FARMERS FEEDBACK ON ASSESSED/DEMONSTRATED TECHNOLOGIES OF CROPS / LIVESTOCK**

**16.1 Farmers feedback on performance of crop varieties/hybrids**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Crop varieties/hybrids assessed/ demonstrated** | **Farmer’s feedback** |
| 1 | Assessing the performance of Hybrid Napier varieties under Chamarajanagara District | * Hybrid bajra napier variety PBN - 342 has recorded higher green forage yield with high palatebality and increased milk yield as compared to CO-3. |
| 2 | Assessment of suitable short duration Turmeric varieties for higher yield and quality |  |
| 3 | Demonstration of Blackgram variety LBG-791 (2nd Year) | * Yellow mosaic virus disease was not observed with LBG-791 as compared to Farmers practice. * Application of Micronutrients and 2 % DAP foliar spray has helped in increasing the no. of pods in turn good yield was obtained. |
| 4 | Demonstration of Ragi variety KMR-630 (2nd year) |  |
| 5 | Demonstration of Redgram variety BRG-3 | * 39.73 % increase in yield was observed when compared to farmers variety. * In BRG-3 no wilt disease was noticed * Adoption of mechanical nipping has reduced the cost of nipping by 62.5 %. * Due to bold sized seeds it has fetched extra 2 rupees per kg. |
| 6 | Demonstration of Chickpea variety BGD-103 | * Incidence of wilt as well as root rot was less in BGD-103 (7.16%) as compared to JAKI-9218 (12.34%). * The variety BGD-103 has came harvest 8-10 days before than JAKI-9218 * Mechanical nipping has helped in getting higher number of branches and reduced cost of labour. * Foliar application of 28:28:0 and micronutrients has helped in enhancing the number of pods per plant. |
| 7 | Popularization short duration improved Turmeric variety IISR Pragathi |  |
| 8 | Promoting / Up scaling to Seed cocoon producers (silkworm single hybrids) FC-1 and FC-2 |  |
| 9 | Scaling up of improved silkworm hybrid FC-1 X FC-2 |  |

**16.2 Farmers feedback on performance of agronomic practices**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Agronomic practices** | **Farmer’s feedback** |
| **1** | Assessment of nutrient management in Potato | Due to Calcium and Sulphur nutrition, reduction in the incidence of blight disease, quality yield and increase net profit |
| **2** | Effect of Nano Nitrogenous fertilizer on Growth and Yield of Maize |  |
| **3** | Assessment of different propagation methods in potato |  |
| **4** | Assessing the efficiency of Trenching and Mulching in (Wider spaced) Tree Mulberry |  |
| **5** | Demonstration of Drum Seeded Rice |  |
| **6** | STCR based nutrient management in irrigated Ragi |  |
| **7** | Sugarcane trash management |  |
| **8** | Integrated Crop Management in Watermelon |  |
| **9** | Integrated Crop Management in Tomato |  |
| **10** | Integrated Crop Management in Cabbage |  |
| **11** | Integrated crop management in Field bean |  |
| **12** | Demonstration on Samruddhi (JHA Technology) for enhanced cocoon / silk production |  |

**16.3 Farmers feedback on performance of pest and disease management in crops**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Pest and disease management in crops** | **Farmer’s feedback** |
| **1** | Assessment of technologies for the management of Panama wilt disease in Banana |  |
| **2** | Assessment on Management of Mites and Thrips in Mulberry |  |
| **3** | Integrated management of Pest and Diseases in Small onion |  |
| **4** | Integrated Disease Management in Banana ( Yelakki) |  |
| **5** | Demonstration of IPM practices for management of leaf roller in Mulberry |  |

**16.4 Farmers feedback on performance of farm machinery technologies N I L**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Farm machinery technologies** | **Farmer’s feedback** |
|  |  |  |

**16.5 Farmers feedback on performance of livestock and fisheries technologies N I L**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Livestock/fisheries technologies** | **Farmer’s feedback** |
|  |  |  |

**PART XVII - FINANCIAL PERFORMANCE**

**17A. Details of KVK Bank accounts**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bank account** | **Name of the bank** | **Location** | **Branch code** | **Account Name** | **Account Number** | **MICR Number** | **IFSC Number** |
| With Host Institute | - | - | - | - | - | - | - |
| With KVK | Canara Bank | Chamarajanagara | 1065 | SS&H, KVK | 0797101026681 | 571015352 | CNRB0000797 |

**17B. Utilization of KVK funds during the year 2020-21(Rs. in lakh)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 15293000 | 15293000 | 8347000 |
| 2 | **Traveling allowances** | 50000 | 50000 | 57000 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 219000 | 219000 | 211000 |
| *B* | POL, repair of vehicles, tractor and equipments | 100000 | 100000 | 125000 |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 74000 | 74000 | 74000 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 4000 | 4000 | 5000 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 586000 | 586000 | 560000 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 164000 | 164000 | 164000 |
| *G* | Training of extension functionaries | 16000 | 16000 | 16000 |
| *H* | Maintenance of buildings | 00 | 00 | 00 |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | 24000 | 24000 | 10000 |
| *J* | Library | 4000 | 4000 | 4000 |
| *K* | Nutrigardens | 21000 | 21000 | 21000 |
| **TOTAL (A)** | | **16579000** | **16579000** | **9594000** |
| **B. Non-Recurring Contingencies** | |  |  |  |
| 1 | **Works** | 00 | 00 | 00 |
| 2 | **Equipments & Furniture** | 600000 | 600000 |  |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 00 | 00 | 00 |
| 4 | **Library** (Purchase of assets like books & journals) | 00 | 00 | 00 |
| **TOTAL (B)** | | **600000** | **600000** |  |
| **C. REVOLVING FUND** | |  |  |  |
| **GRAND TOTAL (A+B+C)** | | **1,71,79,000** | **1,71,79,000** |  |

**17C. Status of revolving fund (Rs. in lakh) for the last three years**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Opening balance as on**  **1st January** | **Income during**  **the year** | **Expenditure during**  **the year** | **Net balance in hand as on**  **31st December of each year** |
| January to December 2019 | 1365969 | 1217615 | 926253 | 1657331 |
| January to December 2020 | 1657331 | 1527107 | 1322321 | 1862117 |
| January to December 2021 | 1862117 | 3221370 | 2444298 | 2639189 |

**18. Details of HRD activities attended by KVK staff N I L**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the staff** | **Designation** | Title of the training programme | Institute where attended | Dates |
| Dr. Sunil. C.M | Scientist (Agronomy) | Vermi-composting and organic farming | Faculty of Agriculture in collaboration with UGC-HRDC, DDU, Gorakhpur University, Gorakhpur, U.P., India (Online Mode) | 30.06.2021 to 03.07.2021 (7 days) |
| Use of statistical tools in agriculture and allied fields | Society of Krishin Vigyan, Kolkata (Online mode) | 16.07.2021 - 19.07.2021 (4 days) |
| Monitoring of farm trials through a clour and mobile based software | Directorate of Extension, GKVK, Bengaluru | 28.09.2021 (1 Day) |
| Scientific training on Agricultural Research Methodologies practices and their management | Samagra vikas welfare society (SVWS) and College of Agricultural University Pasighat, Arunachal Pradesh, India (Online mode) | 04.10.2021 - 24.10.2021 (21 days) |
| Dr. Pampanagouda B. | Programme Assistant (Laboratory) | Online training programme on Advance in Integrated Pest Management approaches | NCIPM, New Delhi(Online mode) | 21.10.2021 - 23.10.2021 |
| Mr. Mohan Kumar. A.B | Scientist (Horticulture) | ICAR - IIHR Technologies for promotion through KVKs | IIHR, Bengaluru(Online mode) | 17.12.2021 to 18.12.2021 |

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