**ICAR-KRISHI VIGYAN KENDRA, GADAG**

**ANNUAL REPORT – 2021**

**(FOR THE PERIOD FROM 01 JANUARY, 2021 TO 31 DECEMBER 2021)**

****

**ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti**

**Gadag district, Karnataka State**

**Pincode: 582205**

**Website:** [**https://kvkgadag.icar.gov.in/**](https://kvkgadag.icar.gov.in/) **E-mail:** [**kvk.Gadag@icar.gov.in**](mailto:kvk.Gadag@icar.gov.in)

**Host Organisation: Agricultural Science Foundation, Hulkoti**

PART I - GENERAL INFORMATION ABOUT THE KVK

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| KVK Address | Telephone | | E mail | Web Address |
|  | Office | Fax |  |  |
| ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti,  Gadag dist. | (08372)289606 /289325 | - | [kvk.Gadag@icar.gov.in](mailto:kvk.Gadag@icar.gov.in)  [kvkhulkoti@gmail.com](mailto:kvkhulkoti@gmail.com) | www.kvkgadag.icar.gov.in |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Address | Telephone | | E mail | Web Address |
| Office | Fax |  |  |
| Agricultural Science Foundation, Hulkoti  Gadag dist. | (08372)  289069 | - | [hulkotiasf@gmail.com](mailto:hulkotiasf@gmail.com) | [www.asf.ind.in](http://www.asf.ind.in) |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Telephone / Contact | | |
|  | Residence | Mobile | Email |
| Dr. L.G. Hiregoudar | - | 9448358772  8073642868 | laxs1961@gmail.com |

1.4. Year of sanction: 1985

**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**  **Level** | **Basic pay** | **Date of joining KVK** | **Permanent**  **/Temporary** | **Category (SC/ST/**  **OBC/**  **Others)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Head/ Senior Scientist | Dr. L.G. Hiregoudar | Programme  Coordinator | M | Crop Physiology | M.Sc (Agri), PhD | L-14 | 218200 | 19.10.1985 | P | OBC |
| 2 | Scientist/SMS | Mr. S.H. Adapur | Subject Matter  Specialist | M | Ag. Extension | M.Sc (Agri) | L-12 | 115800 | 23.06.1995 | P | Others |
| 3 | Scientist/SMS | Dr. Sudha V. Mankani | Subject Matter  Specialist | F | Home Science | M.H.Sc,  PhD | L-12 | 115800 | 26.06.1995 | P | OBC |
| 4 | Scientist/SMS | Mr. N.H. Bhandi | Subject Matter  Specialist | M | Soil Science | M.Sc (Agri) | L-11 | 92500 | 01.06.2005 | P | OBC |
| 5 | Scientist/SMS | Mrs. Hemavati R.H. | Subject Matter  Specialist | F | Horticulture | M.Sc (Horti) | L-10 | 59500 | 14.02.2020 | P | OBC |
| 6 | Scientist/SMS | Dr. Gururaj Kombali | Subject Matter  Specialist | M | Agronomy | M.Sc (Agri), PhD | L-10 | 56100 | 05.10.2021 | P | OBC |
| 7 | Scientist/SMS | Dr. Vinayak Niranjan | Subject Matter  Specialist | M | Ag. Engineering | M.Tech(Ag.Eng), PhD | L-10 | 56100 | 11.10.2021 | P | OBC |
| 8 | Programme Assistant ( Lab Tech.) | Dr. B.M. Murgod | Programme Assistant | M | Animal Science | B.V. Sc | L-7 | 58600 | 25.06.2007 | P | Others |
| 9 | Programme Assistant (Computer) | Mrs. Lalita S.Asuti | Computer  Programmer | F | - | M.Sc (IT) | L-7 | 64100 | 01.06.2005 | P | OBC |
| 10 | Programme Assistant/ Farm Manager | Mr. Suresh L. Halemani | Farm Manager | M | - | B.Sc (Agri.) | L-7 | 52000 | 01.02.2011 | P | OBC |
| 11 | Assistant | Mr. M.B. Jakkanagoudar | Assistant | M | - | M.Com | L-7 | 58600 | 25.06.2007 | P | OBC |
| 12 | Jr. Stenographer | Mr. T.K. Sai Swaroop Rao | Jr. Stenographer | M | - | SSC & Certificate in Stenography | L-4 | 29600 | 15.12.2016 | P | OBC |
| 13 | Driver - 1 | Mr. N.L. Hadapad | Driver-Cum- Mechanic | M | - | 7th Std. | L-4 | 44800 | 03.09.1992 | P | OBC |
| 14 | Driver - 2 | Mr. G.D. Madivalar | Driver-Cum-Mechanic | M | - | 7th Std. | L-4 | 39800 | 26.06.1995 | P | OBC |
| 15 | SS-1 | VACANT | Field Assistant |  |  |  |  |  |  |  |  |
| 16 | SS-2 | Mrs. Savita V. Karadani | Field Assistant | F | - | PUC | L-1 | 18500 | 14.02.2020 | P | OBC |

**1.6. Total land with KVK (in ha): 28.0 ha**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Item** | **Area (ha)** |
| 1 | Under Buildings | 1.5 |
| 2. | Under Demonstration Units | 0.5 |
| 3. | Under Crops | 12.0 |
| 4. | Orchard/Agro-forestry | 14.0 |
| 5. | Others | - |

**1.7. Infrastructural Development:**

**A) Buildings**

| **S.**  **No.** | **Name of building** | **Source of**  **funding** | **Stage** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Complete** | | | **Incomplete** | | |
| **Completion**  **Date** | **Plinth area (Sq.m)** | **Expenditure (Rs. in lakhs)** | **Starting Date** | **Plinth area**  **(Sq.m)** | **Status of construction** |
| 1. | Administrative  Building | ICAR | 1996 | 800 | 33.46 | - | - | - |
| 2. | Farmers Hostel | ICAR | 1997 | 550 | 17.26 | - | - | - |
| 3. | Staff Quarters | ICAR | 31-03-2006 | 400 | 25.82 | - | - | - |
|  | 1 |  |  |  |  |  |  |  |
|  | 2 |  |  |  |  |  |  |  |
|  | 3 |  |  |  |  |  |  |  |
|  | 4 |  |  |  |  |  |  |  |
|  | 5 |  |  |  |  |  |  |  |
|  | 6 |  |  |  |  |  |  |  |
| 4. | Demonstration Units |  |  |  |  |  |  |  |
|  | 1. Dairy | ICAR | 31-03-1997 | 50 | 4.00 | - | - | - |
|  | 2. Sheep & goat | ICAR | 31-03-1997 | 50 | 2.63 | - | - | - |
|  | 3. Organic input production unit | ICAR | 31-03-2011 | 67 | 3.00 |  |  |  |
| 5 | Fencing | ICAR | 31-03-2011 |  | 8.00 |  |  |  |
| 6 | Rain Water harvesting system | ICAR | 31-03-2007 | - | 10.00 | - | - | - |
| 7 | Threshing floor | ICAR | 31-03-2011 | 278 | 2.00 | - | - | - |
| 8 | Farm godown | ICAR | 31-03-2011 | 70 | 3.00 | - | - | - |
| 9 | Vermi Compost | DDB | 31-03-2002 | 100 | 3.50 | - | - | - |
| 10 | Vehicle & implement shed | ICAR | 31-03-2011 | 80 | 3.00 | - | - | - |

B) Vehicles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of vehicle** | **Year of purchase** | **Cost**  **(Rs. in lakhs)** | **Total kms. Run** | **Present status** |
| Jeep  (Mahindra Bolero) | 2009 | 6.00 | 209862 | Needs replacement |
| Tractor | 2003 | 5.00 | 11680 Hrs | Needs replacement |
| Motor cycle - I | 2004 | 0.40 | 81489 | Good |
| Motor cycle - II | 2009 | 0.50 | 56627 | Good |

**C) Lab Equipment & AV aids**

| **Name of the equipment** | **Year of purchase** | **Quantity (No.)** | **Cost**  **(Rs. in lakhs)** | **Present status** |
| --- | --- | --- | --- | --- |
| Computer | 2008 | 1 | 1.00 | Good |
| Digital Amplifier with Public Address System | 2013 | 1 | 0.36 | Good |
| OHP | 2004 | 1 | 0.25 | Good |
| Motorised projection screen | 2013 | 1 | 0.21 | Good |
| White board | 2013 | 1 | 0.14 | Good |
| LED display board | 2013 | 1 | 0.10 | Good |
| Lap top Computer | 2007 | 1 | 0.53 | Not Good |
| LCD | 2007 | 1 | 0.45 | Good |
| Ceramic black board | 2007 | 1 | 0.12 | Good |
| Lab equipments for dairy and goatery | 2011 | 1 | 0.50 | Good |
| Generator | 2011 | 1 | 1.00 | Good |
| EPBAX system | 2011 | 1 | 0.50 | Good |
| Equipments of Plant health diagnostic unit | 2011 | 1 | 10.00 | Good |
| Laptop computer | 2016-17 | 1 | 0.589 | Good |
| Desktop computer | 2016-17 | 1 | 0.25 | Good |
| Printer | 2016-17 | 1 | 0.181 | Good |
| Copier | 2016-17 | 1 | 0.595 | Good |
| Projector | 2016-17 | 1 | 0.48 | Good |
| Digital camera | 2016-17 | 1 | 0.242 | Good |
| Pico projector | 2016-17 | 1 | 0.145 | Good |
| Amplifier | 2016-17 | 1 | 0.055 | Good |
| Class room chairs | 2016-17 | 1 | 0.21 | Good |
| File cabin | 2016-17 | 1 | 0.20 | Good |
| Hostel furniture | 2016-17 | 1 | 0.59 | Good |
| Projector Screen | 2020-21 | 1 | 0.24 | Good |
| Laptop | 2020-21 | 1 | 0.79 | Good |
| Desktop | 2020-21 | 1 | 0.44 | Good |
| Office furniture | 2020-21 | 1 | 1.02 | Good |

**D) Farm equipment and implements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the equipment/implement** | **Year of purchase** | **Quantity (No.)** | **Cost (Rs.)** | **Present status** |
| Hipro lab model gin machine | 2006 | 1 | 0.70 | Good |
| Seed delinting machine | 2006 | 1 | 0.18 | Good |
| Cotton seed sorter | 2007 | 1 | 0.50 | Good |
| Seed treatment drum | 2007 | 1 | 0.40 | Good |
| Rotavator | 2008 | 1 | 0.75 | Good |
| Rotary weeder | 2009 | 1 | 0.84 | Good |
| Laser guided land leveler | 2011 | 1 | 3.89 | Good |
| Power tiller | 2011 | 1 | 2.72 | Good |

**1.8. Details of SAC meeting organised**

| **Date** | **Number of Participants** | **Salient Recommendations** | **Action taken** | **Remarks, if any** |
| --- | --- | --- | --- | --- |
| 04-12-2021 | 18 | Take up trial in Greengram crop with DGGV-7 variety in comparison with DGGV-2 and local China Moong | This will be taken up during Kharif 2022 |  |
| For machine harvesting of Greengram crop, spray Paraquat @ 0.5 ml/litre for shedding of leaves to ease the harvesting operations. Take up this treatment under demonstration. | It will be carried out during 2022 |  |
| Conduct trial in Bengalgram crop with DBGV-204 & Digvijaya in comparison with JAKI-9218 and Local Annigeri-1 | It will be proposed under OFT |  |
| Advise farmers to practice crop rotation in Bengalgram crop to avoid severe incidence of pest and diseases in succeeding year. | Farmers will be advised to take up crop rotation |  |
| Conduct demonstrations on nipping with solar operated nipping machine in Chickpea crop | It is already being carried out in FLDs |  |
| Check suitability of Kadari Lepakshi variety in both Kharif and Rabi seasons in Gadag district in Groundnut crop | The variety will be tested in Kharif 2021. Due to heavy rains, assessment was incomplete |  |
| Conduct demonstration of Groundnut harvester | It will be proposed in Action plan 2022-23 |  |
| Demonstrate Splat pheromone trap for Pink Boll worm incidence in Bt. Cotton | It will be carried out in Action plan 2022-23 |
| Take up trial in Onion crop with White Onion (Bheema Shubra) variety in comparison with Red Onion in Kharif season to test the severity of twister disease and the profitability in comparison with Red Onion. | It will be proposed in Action plan 2022-23 |  |
| Conduct demonstrations on Onion powder making and flakes making | It will be carried out during 2022-23 |  |
| Demonstrate spray of Gokrupamrutha in Chilli crop as one of the best practice | It will be carried out during 2022-23 |  |
| Publish literature on dry chilli production technologies in association with Dr.C.M.Rafi, Extension Leader, AEEU, Gadag under UAS, Dharwad | The literature will be developed during 2022-23 |  |
| Conduct FFS in fodder crops | It will be proposed during 2022-23 |  |
| Impart trainings on Integrated animal husbandry activities | It is already being carried out |  |
| Provide information and literature pertaining to Integrated Tick Management Technology during trainings. | It is already being carried out |  |
| Impart trainings on chaff cutting machine and enrichment of dry fodder | It is already being carried out |  |
| Take service of Scientists / Professors of Veterinary College in KVK adopted villages | Services will be taken for KVK programmes |  |
| Encourage farmers for participatory seed / fodder slips production | This is already being implemented by KVK through fodder cafeteria |  |
| Make impact study of Nutri Gardens | Impact study has been carried out. It is included in Annual Report of 2021-22 |  |
| Encourage farm women to take up seed multiplication under Nutri Garden for succeeding seasons. | This will be carried out in Kharif 2022 |  |
| Suggest farmers to take up rejuvenation of old Mango orchards which are non-productive | This will be taken up after the harvest of Mangoes |  |
| Conduct demonstration on use of Drone for spraying operations in orchards viz., Mango, Cashewnut etc. | Demonstration on Drone spray was carried out at KVK’s Mango orchard. Service was provided by Garuda, Chennai |  |
| Demonstrate preparation of BAKAHU products in Hammigi village in Mundaragi block as there are good number of Banana growers | Demonstration on BAKAHU preparation will be carried out during the year 2022-23 |  |
| Train a group of 5 youths as Coconut Friends Group to help farmers in cleaning / spraying and harvesting of Coconut palms | It will be carried out during June-July 2022 |  |

**PART II - DETAILS OF DISTRICT**

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

|  |  |
| --- | --- |
| S. No | Farming system/enterprise |
| Rainfed situation | |
| 1 | Agricultural crops + Dairy enterprise |
| 2 | Agricultural crops + Horticultural crops |
| 3 | Agriculture + Horticulture + Dairy enterprise |
| Irrigated situation | |
| 1 | Agriculture + Dairy enterprise |
| 2 | Agriculture + Horticulture + Dairy enterprise |
|  |  |

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

topography)

|  |  |  |
| --- | --- | --- |
| S. No | Agro-climatic Zone | Characteristics |
| 1 | Northern Dry Zone-3 and Region-2 of the state | This zone comprises of Gadag, Ron, Mundaragi, Gajendragad and Naragund blocks. Rainfall ranges from 450-600 mm with 30-35 rainy days mainly from June – September months. Maximum temperature ranges from 36-400 c. This zone is drought prone.  Kharif crops grown: Greengram, Groundnut, Onion, Bt. Cotton  Chilli, Sunflower, Maize etc  Rabi crops grown: Bengalgram, Rabi Sorghum, wheat, sunflower etc |
| 2 | Northern Semi Transitional Zone-8 and Region-4 of the state | This zone comprises of Shirahatti and Laxmeshwar blocks. Average rainfall is 619 mm. Gets rainfall from both South-West and North-East mansoons.  Kharif crops grown: Greengram, Sorghum, Bt-cotton, Groundnut, Sunflower, Millets, Maize, Onion, Chilli etc  Rabi crops grown:Rabi Sorghum, Sunflower, Bengal gram, Wheat etc |

2.3 Soil type/s

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Soil type | Characteristics | Area in ha |
| 1 | Very shallow red gravelly loam soils | Less water holding capacity with less runoff and high infiltration rate, | 26,625 |
| 2 | Shallow red gravelly mixed with deep black soils | Less water holding capacity with moderate runoff and high infiltration rate. It contains high sand percent. | 10,659 |
| 3 | Medium deep red clayey soils | Moderate water holding capacity with less runoff and moderate infiltration rate. It contains high clay percent. | 25,210 |
| 4 | Medium deep red gravelly clay soils | Moderate water holding capacity with less runoff and high infiltration rate. It contains high clay percent. | 63,163 |
| 5 | Deep red gravelly clay soils | High water holding capacity with less runoff and less infiltration rate. It contains high clay percent. | 8,290 |
| 6 | Medium deep black clayey soils | Moderate water holding capacity with high runoff and less infiltration | 1,50,117 |
| 7 | Deep black clayey soils | More water holding capacity with low infiltration rate of water & clay content is more than 35 percent | 67,444 |
| 8 | Deep black calcareous clayey soils | More water holding capacity with low infiltration rate and high runoff. It contains more percent of Calcium | 92,238 |
| 9 | Deep alluvial black clayey soils | More water holding capacity with low infiltration rate and high run off. | 17,088 |
| 10 | Deep alluvial clayey soils (salt affected in patches) | More water holding capacity, less infiltration rate and high run off affects the seed germination | 1,053 |
|  |  | Total | **4,61,887** |

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

(Reference year: 2017-18)

| Sl. No | Crop | Area (ha) | Production (Metric tons) | Productivity  (Kg /ha) |
| --- | --- | --- | --- | --- |
|  | **Cereals** |  |  |  |
| 1 | Maize | 38468 | 135651 | 3712 |
| 2 | Rabi Sorghum | 76846 | 54471 | 746 |
| 3 | Wheat (Irrigated) | 18042 | 9701 | 566 |
| 4 | Paddy (Irrigated) | 2437 | 7638 | 3299 |
|  | **Pulses** |  |  |  |
| 4 | Greengram | 77077 | 6224 | 85 |
| 5 | Bengalgram | 132538 | 58549 | 465 |
| 6 | Redgram | 3373 | 2150 | 671 |
|  | **Oilseeds** |  |  |  |
| 7 | Groundnut | 36275 | 32341 | 938 |
| 8 | Sunflower | 31373 | 18151 | 609 |
|  | **Commercial crops** |  |  |  |
| 9 | Bt. Cotton | 35230 | 99563 | 506 |
| 10 | Onion | 29671 | 343420 | 11.5 tonns |
| 12 | Dry chillies | 15102 | 72489 | 480 |

Source: Gadag District Statistical Report-FY 2018-19

**2.5. Weather data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | Temperature 0 C | | Relative Humidity (%) |
|  | Maximum | Minimum |
| January, 2021 | 31.4 | 30.21 | 21.15 | 86.06 |
| February, 2021 | 22.8 | 30.72 | 14.86 | 85.53 |
| March, 2021 | 0 | 35.22 | 16.98 | 85.45 |
| April, 2021 | 40.4 | 36.6 | 25.34 | 86.8 |
| May, 2021 | 94.9 | 35.21 | 22.57 | 88.16 |
| June, 2021 | 94.1 | 32.23 | 24.51 | 87.46 |
| July, 2021 | 111.9 | 28.43 | 20.67 | 91.32 |
| August, 2021 | 75.8 | 29.91 | 20.45 | 89.16 |
| September, 2021 | 79.5 | 29.36 | 20.49 | 90.06 |
| October, 2021 | 76.6 | 30.97 | 20.28 | 86.67 |
| November, 2021 | 77 | 28.58 | 19.03 | 86.03 |
| December, 2021 | 4.66 | 27.84 | 15.78 | 84.03 |

* 1. **Production and Productivity of Livestock, Poultry, Fisheries etc. in the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Production** | **Productivity** |
| **Cattle** | | | |
| *Crossbred* | 24153 | 25968 Lit. of milk/day | 5.22 Kg/day |
| *Indigenous* | 118502 | 45944 Lit of milk/day | 2.40 Kg/day |
| **Buffalo** | 60989 | 64088 Lit. of milk/day | 2.80 Kg/day |
| **Sheep** | | | |
| Crossbred | 335 |  |  |
| *Indigenous* | 258712 | 158 tons/year (meat) | 15 Kg/animal |
| **Goats** | 106353 | 134 tons/year (meat) | 16 Kg/animal |
| **Pigs** |  |  |  |
| *Crossbred* | 557 |  |  |
| *Indigenous* | 6012 |  |  |
| **Rabbits** | 341 |  |  |
| **Dogs** | 16711 |  |  |
| **Others** | 311 |  |  |
| **Poultry birds (egg production)** | 156275 | 72 lakh/year | 100 per year |

Source: Gadag District Statistical Report-FY 2018-19

*Note: The data for the year 2021 is not available at District Statics Office / Office of Deputy Directory of AH & VS*

* 1. District profile has been **Updated** for 2021 : Yes (Latest available data is uploaded)

**2.8 Details of Operational area / Villages**

| **Sl. No.** | **Taluk** | **Name of the village** | **How long the village is covered under operational area of the KVK** | **Major crops & enterprises** | **Major problems identified** | **Identified Thrust Areas** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Gadag | Shirol | Since three years  (Since 2019) | **Crops:** Bt.Cotton, Maize, Foxtail millet, vegetable crops & flower crops  **Enterprise:** CB Cows | **Bt. Cotton :**   * Low income due to mono cropping * Incidence of sucking pest & mirid bug * Incidence of leaf spot & leaf reddening * Drudgery in harvesting | * Training on ICM in Bt.Cotton + Greengram * Training on IPM in Bt. Cotton * Supply of literature * Conductance of Field day |
|  |  |  |  |  | **Maize :**   * Low income due to mono cropping * Imabalanced nutrition * Incidence of army worm * Incidence of Turcicum leaf blight * Drudgery during threshing and winnowing of Maize | * Demonstration on Maize + Redgram (4:2) intercropping system * Training on ICM in Maize+Redgram intercropping system * Training on IPM in Maize * Supply of literature * Demonstration on functional clothing kit * Conductance of Field day * Training on drudgery reduction |
|  |  |  |  |  | **Foxtail millet :**   * Low productivity due to cultivation of local variety * Lack of awareness on importance of millet and value addition | * Training on production technology of millet crops * Training on importance of millets in diet * Supply of literature |
|  |  |  |  |  | **Vegetable crops :**   * Low income due to cultivation of local varieties | * Demonstration of new varieties of ICAR-IIHR, Bengaluru in vegetable crops * Training on ICM in vegetable crops * Supply of literature * Conductance of Field day |
|  |  |  |  |  | **Flower crops :**   * Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) * Low yield is also due to incidence of bud borer pest and leaf spot diseases | * Demonstration on ICM in Chrysanthemum * Training on ICM in flower crops * Supply of literature * Field day |
|  |  |  |  |  | **Dryland horticulture :**   * Less profit from existing cropping pattern due to vagaries of mansoon and lack of crop diversification | * Training on tree based farming system * Supply of literature |
|  |  |  |  |  | **Borewell :**   * Decreased ground water level and less water availability for irrigation | * Training on recharge of ground water through borewell * Supply of literature * Field visit and interactive meetings at site |
|  |  |  |  |  | **CB Cows:**   * Low productivity of milk due to non-availability of green fodder throughout the year. | * Demonstration on fodder and azolla production, Hydroponic fodder production and silage making * Supply of literature * Field day |
|  |  |  |  |  | * Nutrition and health | * Demonstration on nutri-farms for year round nutritional security among farm families * Training on balanced diet and nutrition * Training on healthy foods for healthy life * Training on importance of millets in diet |
|  |  |  |  |  | **Grain storage :**   * Incidence of stored grain pest | * Training on management of stored grain pests * Home visits and interactive meetings * Supply of literature |
| 2 | Mundaragi block | Shingatarayankeri | Since three years  (Since 2019) | **Crops:** Greengram, Bt.Cotton, Maize, Foxtail millet, Spreading Groundnut, vegetable crops & flower crops  **Enterprise:** CB Cows | **Bt. Cotton :**   * Low income due to mono cropping * Incidence of sucking pest & mirid bug * Incidence of leaf spot & leaf reddening | * Training on ICM in Bt.Cotton + Greengram * Training on IPM in Bt. Cotton * Supply of literature |
|  |  |  |  |  | **Maize :**   * Low income due to mono cropping * Imabalanced nutrition * Incidence of army worm * Incidence of Turcicum leaf blight * Drudgery during threshing and winnowing of Maize | * Demonstration on Maize + Redgram (4:2) intercropping system * Training on ICM in Maize+Redgram intercropping system * Training on IPM in Maize * Supply of literature * Demonstration on Functional Clothing Kit * Field day |
|  |  |  |  |  | **Foxtail millet :**   * Low productivity due to cultivation of local variety | * Training on production technology of millet crops * Supply of literature |
|  |  |  |  |  | **Spreading Groundnut :**   * Low yield is due to incidence of leaf minor and leaf spot | * Training on ICM practices in Spreading Groundnut |
|  |  |  |  |  | **Greengram :**   * Low yield due to incidence of powdery mildew | * Demonstration on ICM practices in Greengram * Training on ICM practices in Greengram * Supply of literature * Field day |
|  |  |  |  |  | **Vegetable crops :**   * Low income due to cultivation of low yielding local varieties | * Demonstration of new varieties of ICAR-IIHR, Bengaluru in vegetable crops * Training on ICM practices in vegetable crops * Supply of literature * Field day |
|  |  |  |  |  | **Flower crops :**   * Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) * Low yield is also due to incidence of bud borer pest and leaf spot diseases | * Demonstration on ICM practices in Chrysanthemum * Training on commercial flower crops * Supply of literature * Field day |
|  |  |  |  |  | **Dryland horticulture :**   * Less profit from existing cropping pattern due to vagaries of mansoon and lack of crop diversification | * Training on tree based farming system * Supply of literature |
|  |  |  |  |  | **CB Cows**   * Low productivity of milk due to non-availability of green fodder throughout the year. | * Demonstration on fodder and azolla production * Supply of literature on Fodder & Azolla production * Field day on fodder production |
|  |  |  |  |  | **Nutrition and health**   * Less consumption of fruits and vegetables | * Demonstration on nutri-farms for year round nutritional security among farm families * Training on balanced diet and nutrition * Training on healthy foods for healthy life * Training on importance of millets in diet |
|  |  |  |  |  | **Grain storage**   * Incidence of stored grain pest | * Training on management of stored grain pests * Home visits and interactive meetings * Supply of literature |
| 3 | Shirahatti | Chikkasavanur | Since three years  (Since 2019) |  | **Maize:**   * Low income due to mono cropping * Imabalanced nutrition * Incidence of army worm * Incidence of Turcicum leaf blight * Drudgery during threshing and winnowing of Maize | * Demonstration of Maize + Redgram (4:2) intercropping system * Training on ICM practices in Maize+Redgram intercropping system * Training on IPM practices in Maize * Demonstration of Functional clothing kit * Supply of literature |
|  |  |  |  |  | **Foxtail millet :**   * Low productivity due to cultivation of local variety * Lack of awareness on importance of millet and value addition | * Training on production technology of millet crops * Supply of literature |
|  |  |  |  |  | **Spreading Groundnut :**   * Low yield due to incidence of leaf minor and leaf spot | * Training on ICM practices in Spreading Groundnut |
|  |  |  |  |  | **Summer Groundnut :**   * Incidence of leaf minor and leaf spot | * Demonstration on ICM practices in summer groundnut (NMOOP) * Training on pest and disease management * Supply of literature * Field day |
|  |  |  |  |  | **Greengram :**   * Low yield due to incidence of powdery mildew | * Demonstration on ICM practices in Greengram with DDGV-2 variety * Training on ICM practices in Greengram |
|  |  |  |  |  | **Vegetable crops :**   * Low income due to cultivation of low yielding local varieties | * Demonstration of new varieties of ICAR-IIHR, Bengaluru in vegetable crops * Training on ICM in vegetable crops * Supply of literature * Field day |
|  |  |  |  |  | **White Onion :**   * Low productivity due to cultivation of low yielding local variety | * Assessment of White Onion varieties * Training on production technology in white onion |
|  |  |  |  |  | **Flower crops :**   * Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) * Low yield is also due to incidence of bud borer pest and leaf spot diseases | * Demonstration on ICM practices in Chrysanthemum * Training on commercial flower crops * Supply of literature * Field day |
|  |  |  |  |  | **Dryland horticulture :**   * Less profit from existing cropping pattern due to vagaries of mansoon and lack of crop diversification | * Training on tree based farming system * Supply of literature |
|  |  |  |  |  | **CB Cows :**   * Low productivity of milk due to non-availability of green fodder throughout the year. | * Demonstration on fodder and azolla production * Supply of literature on Fodder & Azolla production * Field day on fodder production |
|  |  |  |  |  | **Nutrition and health :**   * Less consumption of fruits and vegetables | * Demonstration on nutri-farms for year round nutritional security among farm families * Training on balanced diet and nutrition * Training on importance of millets in diet |
|  |  |  |  |  | **Grain storage:**  Incidence of stored grain pest | * Training on management of stored grain pests * Home visits and interactive meetings * Supply of literature |
| 4 | Naragund | Kalakeri | Since three years  (Since 2019) |  | **Greengram:**   * Low productivity due to usage of low yielding local variety * Incidence of yellow mosaic virus * Incidence of powdery mildew * Incidence of Spital bug and pod borer | * Demonstration on ICM practices in DGGV-2 variety in Greengram * Training on ICM practices in Greengram * Supply of literature * Field day |
|  |  |  |  |  | **Bengalgram :**   * Low yield due to cultivation of low yielding local variety * Low yield due to incidence of wilt & rust and incidence of pod borer | * Assessment of BGD-111 and DBGV-204 varieties * OFT on assessment of seed treatment with Trichoderma and soil treatment with Trichoderma, neem cake and FYM for wilt control * Training on ICM in Bengalgram * Supply of literature * Field day |
|  |  |  |  |  | **Red Onion :**   * Low productivity due to cultivation of low yielding local variety * Incidence of thrips reduces the yields | * Training on ICM in Red Onion * Supply of literature * Field day |
|  |  |  |  |  | **Rabi Sorghum :**   * Low productivity due to usage of local variety * Incidence of smut disease * Incidence of shoot fly and stem borer | * Demonstration on ICM practices in SPV-2217 variety * Training on ICM practices in Rabi Sorghum * Supply of literature * Field day |
|  |  |  |  |  | **Drudgery :**   * Drudgery in farm activities | * Training on drudgery reducing equipments in farm activities |
|  |  |  |  |  | **Nutrition and health :**   * Less consumption of millets, fruits and vegetables in daily diet | * Training on health and nutrition, importance of millets in diet |

* 1. **Priority thrust areas**

|  |  |
| --- | --- |
| **S. No** | **Thrust area** |
| 1 | Soil fertility management through production and application of bio-manures |
| 2 | Promotion of intercropping systems in Maize and Bt.Cotton crops |
| 3 | Promotion of JAKI-9218 & BGD-111-01 varieties of Bengalgram |
| 4 | Promotion of SPV-2217 variety of Rabi Sorghum |
| 5 | Assessment of varieties in Red and White Onions |
| 6 | Crop diversification through promotion of Cashew |
| 7 | Promotion of nutri-farms |
| 8 | Popularisation of drudgery reduction equipments |
| 9 | Primary processing in tamarind |
| 10 | Post harvest technologies |
| 11 | Livestock nutrition for higher milk productivity |

**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** |
| 5 | 5 | 16 | 16 | 14 | 14 | 236 | 236 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 115 | 124 | 4500 | 4559 | 12 | 15 | 360 | 409 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Extension personnel)** | | | | **Training (sponsored)** | | | |
| **5** | | | | **6** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 10 | 12 | 300 | 484 | 20 | 25 | 600 | 917 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Vocational)** | | | | **Extension Programmes** | | | |
| **7** | | | | **8** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 3 | 3 | 75 | 75 | 600 | 686 | 9000 | 9101 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed Production (Q)** | | **Planting material (Nos.)** | |
| **9** | | **10** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 80.00 | 85.14 | 80000 | 83050 |
|  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Livestock, poultry strains and fingerlings (No.)** | | | | **Bio-products (Kg)** | | | |
| **11** | | | | **12** | | | |
| **Target** | | **Achievement** | | **Target** | | **Achievement** | |
| 10 | | 10 | | 14000 | | 15078.5 | |
|  | |  | |  | |  | |
|  | |  | |  | |  | |
| **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** |
| 1200 | 1291 | 2500 | 2916 | 40 | 50 | 20000 | 22733 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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

| **S. No** | **Thrust area** | **Crop/**  **Enterprise** | **Identified Problem** | **Interventions** | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Title of OFT if any** | **Title of FLD if any** | **Number of Training (farmers)** | **Number of Training (Youths)** | **Number of Training (extension personnel)** | **Extension activities**  **(No.)** | **Supply of seeds (Qtl.)** | **Supply of planting materials (No.)** | **Supply of live- stock (No.)** | **Supply of bio products** | |
| **No.** | **Kg** |
| 1 | Varietal Assessment | Bunch Groundnut | Low productivity due to moisture stress caused by long dry spells | Assessment of TG-37A and DGRMB-24 (drought tolerant varieties) | - | 2 | - | - | 5 | 3.6 | - | - | - |  |
| 2 | Varietal assessment | Safflower | Low yield of A-1 variety | Assessment of ISF-764 variety for higher productivity | - | 3 | - | - | 4 | 0.3 | - | - | - | - |
| 3 | Varietal demonstration (ICM) | Greengram | * Low yield due to usage of local variety * Incidence of Yellow Mosaic Virus * Incidence of pod borer * Incidence of powdery mildew | - | Demonstration of DGGV-2 variety in Greengram crop (ICM practices) | 2 | - | - | 3 | 1.25 | - | - | 2.0 | 10.0 |
| 4 | Varietal Assessment | Bengalgram |  | * Assessment of BGD-111-01 & DBGV-204 varieteis for higher productivity | - | 3 | - | - | 4 | 1.8 | - | - | - | 3.6 |
| 5 | Integrated Nutrient Management | Onion | Poor bulb quality and low productivity due to imbalancednutrition | Assessment of Sulphur nutrition in Onion | - | - | - | - | - | 0.18 Qtls  (Bheema Super variety) | - | - | 2 | 12 |
| 6 | PHT | Chilli | Unhygenic way of drying of Red chillies |  | Demonstration of Solar drier for drying of Red chillies | 2 | - | - | 1 | - | - | - | - | - |
| 7 | PHT | Onion | Lack of awareness on suitable methods of Onion storage for domestic purpose | Assessment of Onion storage methods for domestic purpose | - | 2 | - | - | 1 | - | - | - | - | - |
| 8 | Intercropping system | Maize+ Redgram | Low income due to sole crop | - | Maize+ Redgram (4:2) intercropping system | 2 | - | - | 2 | 1.5 Qtls  (Redgram) | 0 | 0 | 3 | 20 |
| 9 | Varietal Assessment | White Onion | Low yield, keeping quality and income due to cultivation of local variety | Assessment of White Onion varieties for higher productivity | - | 4 | - | - | 12 | 0.2 | - | - | - | - |
| 10 | Varietal demonstration | Ridgegourd | * Low productivity and low income due to non-availability of improved Ridge gourd vegetable varieties * Low yield due to non-application of imbalanced nutrients and powdery mildew incidence |  | Demonstration of Arka Prasan variety of Ridgegourd crop | 5 | 0 | 0 | 15 | 0.05 | - | - | - | - |
| 11 | Varietal demonstration | Dolichos bean | * Low productivity and low income due to non-availability of improved Dolichos bean vegetable varieties * Low yield due to application of imbalanced nutrients and pod borer incidence |  | Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | 4 | 0 | 0 | 12 | 0.48 | - | - | - | - |
| 12 | Integrated Crop Management | Chrysanthemum | * Low quality and low yields due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) * Low yield due to incidence of bud borer pest and leaf spot diseases | - | ICM in Chrysanthemum crop | 5 | - | - | 14 | - | - | - | - | 800 Kg neem cake |
| 13 | Integrated Crop Management | Green chilli | * Low productivity due to imbalanced nutrient application * High incidence of thrips, mites (Murda Complex) and fruit borer * Incidence of powdery mildew, leaf spot and Anthracnose | - | Integrated Crop Management in Green Chilli | 6 | 0 | 0 | 17 | - | - | - | - | *Trichoderma viride*  -16 kgs,  Neem cake-1600 kgs and  Arka Microbial Consortium – 16 Kgs, |
| 14 | Integrated Pest and Disease management | Red Chilli | * Moisture stress during critical stage of crop growth * Non-availability of quality and pure seeds of Byadagi dabbi and Byadagi kaddi * High incidence of sucking pests leading to murda complex disease * High incidence of anthracnose disease * Lack of proper knowledge on ICM practices resulting in poor productivity and quality * Improper post-harvest management leading to high content of aflatoxin in pod | - | Integrated Pest and Disease Management in red chilli variety Byadagi Chilli | 8 | 0 | 0 | 28 | - | - | - | - | *Trichoderma viride*  -37.5 Kgs,  and  Arka Microbial Consortium – 7.5kgs, |
| 15 | Seed production | Red Onion seed production | * Non availability of seeds of improved Onion varieties * Lack of knowledge on scientific seed production practices | - | Demonstration of seed production enterprise in Red onion variety Bheema Super | 3 | 0 | 0 | 12 | 0.05 Foundation seeds | - | - | - | - |
| 16 | Health & Nutrition | Nutrition Garden | Lack of awareness on Nutri Garden & less consumption of fruits and vegetables | - | Nutri Garden | 10 | 0 | 3 | 15 |  | - | - | - | - |
| 17 | Nutrition Management in dairy animals | Fodder production | Low productivity of milk in CB cow due to Non-cultivation of perennial fodder and grass species | - | Demonstration of Fodder Cafeteria | 3 | 9 | 2 | 15 | 1.05 | 74500 | 2 Kids  1 lamb | - | - |

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

| **S. No** | **Title of Technology** | **Source of technology** | **Crop/enterprise** | **No. of programmes conducted** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **OFT** | **FLD** | **Training** | **Others**  **(Extension activities)** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 1 | Assessment of TG-37A and DGRMB-24 (drought tolerant varieties)   * GPBD-4 * TG-37A * DGRMB-24 | UAS, Dharwad  Directorate of Groundnut Research, Junagad, Gujarat | Groundnut | 3 | 0 | 2 | 3 |
| 2 | Assessment of ISF-764 variety for higher productivity | IIOR, Hyderabad | Saffflower | 2 | - | 3 | 4 |
| 3 | Demonstration of DGGV-2 variety in Greengram crop (ICM practices)   * DGGV-2 | UAS, Dharwad | Greengram | - | 25 | 2 | 1 |
| 4 | * Assessment of BGD-111-01 & DBGV-204 varieteis for higher productivity | IARI, RRC, Dharwad and  UAS. Dharwad | Bengalgram | 3 | - | 3 | 4 |
| 5 | Assessment of Sulphur Nutrition in Onion | UAS, Dharwad, UAS Bagalkot and ICAR-DOGR, Pune | Onion | 2 | 0 | 2 | 2 |
| 6 | Solar drier | Rudra solar drier | Chilli | 0 | 3 | 2 | 5 |
| 7 | Onion storage structures | UHS, Bagalkot & ICAR-DOGR, Pune | Onion | 3 | 0 | 3 | 6 |
| 8 | Maize + Redgram intercropping system | UAS, Dharwad | Maize + Redgram | - | 1 | 2 | 2 |
| 9 | Assessment of White Onion varieties for higher productivity | ICAR-DOGR, Pune | White Onion | 3 | - | 4 | 12 |
| 10 | Demonstration of Arka Prasan variety of Ridgegourd crop | ICAR-IIHR, Bengaluru | Ridgegourd | - | 10 | 5 | 15 |
| 11 | Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | UAS,GKVK Bengaluru | Dolichos bean | - | 06 | 4 | 12 |
| 12 | Integrated Crop Management in Green Chilli | UHS, Bagalkot & IIHR, Bengaluru | Green chilli | - | 16 | 6 | 17 |
| 13 | Integrated Pest and Disease Management in red chilli variety Byadagi Chilli | IIHR, Bengaluru and UAS, Dharwad | Red chilli | - | 15 | 8 | 28 |
| 14 | ICM in Chrysanthemum crop | ICAR-IIHR, Bengaluru | Chrysanthemum | - | 20 | 5 | 14 |
| 15 | Demonstration of seed production enterprise in Red onion variety Bheema Super | ICAR-DOGR, Pune | Seed production enterprise | - | 05 | 3 | 12 |
| 16 | Nutrition Garden | UAS, Bengaluru | Health and nutritional security | 0 | 25 | 13 | 15 |
| 17 | Demonstration of Fodder Cafeteria | ICAR-IGFRI, RRS, Dharwad & UAS, Dharwad | CB Cows | 0 | 10 | 14 | 15 |

**3.B2 contd..**

|  | **No. of farmers covered** | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **OFT** | | | | **FLD** | | | | **Training** | | | | **Others (Extension activities)** | | | |
|  | **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** |
| Assessment of TG-37A and DGRMB-24 (drought tolerant varieties)   * GPBD-4 * TG-37A * DGRMB-24 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 8 | 3 | 2 | 48 | 10 | 3 | 1 |
| Assessment of ISF-764 variety for higher productivity | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 15 | 10 | 10 | 92 | 25 | 16 | 10 |
| Demonstration of DGGV-2 variety in Greengram crop (ICM practices)   * DGGV-2 | 0 | 0 | 0 | 0 | 20 | 5 | 0 | 0 | 40 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| Assessment of BGD-111-01 & DBGV-204 varieteis for higher productivity | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 20 | 6 | 6 | 102 | 32 | 14 | 12 |
| Assessment of Sulphur Nutrition in Onion | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 10 | 3 | 2 | 50 | 14 | 3 | 0 |
| Solar drier | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 32 | 55 | 4 | 6 | 23 | 58 | 3 | 8 |
| Onion storage structures | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 15 | 1 | 4 | 10 | 36 | 2 | 6 |
| Maize + Redgram intercropping system | 0 | 0 | 0 | 0 | 45 | 5 | 0 | 0 | 60 | 8 | 0 | 0 | 85 | 0 | 0 | 0 |
| Assessment of White Onion varieties for higher productivity | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 83 | 10 | 25 | 7 | 54 | 23 | 17 | 16 |
| Demonstration of Arka Prasan variety of Ridgegourd crop | 0 | 0 | 0 | 0 | 7 | 0 | 3 | 0 | 60 | 22 | 24 | 9 | 60 | 19 | 26 | 15 |
| Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 53 | 16 | 19 | 2 | 42 | 13 | 23 | 10 |
| Integrated Crop Management in Green Chilli | 0 | 0 | 0 | 0 | 14 | 0 | 2 | 0 | 58 | 18 | 26 | 8 | 76 | 35 | 16 | 19 |
| Integrated Pest and Disease Management in red chilli variety Byadagi Chilli | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 129 | 27 | 48 | 13 | 94 | 11 | 25 | 10 |
| ICM in Chrysanthemum crop | 0 | 0 | 0 | 0 | 15 | 0 | 5 | 0 | 78 | 12 | 38 | 12 | 56 | 19 | 15 | 10 |
| Demonstration of seed production enterprise in Red onion variety Bheema Super | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 41 | 15 | 23 | 13 | 41 | 18 | 16 | 17 |
| Nutrition Garden | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 2 | 42 | 383 | 10 | 49 | 45 | 204 | 5 | 20 |
| Demonstration of Fodder Cafeteria | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 227 | 45 | 20 | 15 | 92 | 54 | 25 | 17 |

**PART IV - On Farm Trial**

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

| **Thematic areas** | **Cereals** | **Oilseeds** | **Pulses** | **Commercial Crops** | **Vegetables** | **Fruits** | **Flower** | **Plantation crops** | **Tuber Crops** | **TOTAL** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Integrated Nutrient Management |  |  |  |  | 1 |  |  |  |  | 1 |
| Varietal Evaluation |  | 2 | 1 |  | 1 |  |  |  |  | 4 |
| Integrated Pest Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  |  |  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |  |  |  |  |  |
| Storage Technique |  |  |  |  |  |  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| **Total** |  | **2** | **1** |  | **2** |  |  |  |  | **5** |

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

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

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

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

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

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

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

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

| **Thematic areas** | **Crop** | **Name of the technology assessed** | **No. of trials** | **Number of farmers** | **Area in ha (Per trial covering all the Technological Options)** |
| --- | --- | --- | --- | --- | --- |
| Integrated Nutrient Management | Onion | Assesment of Sulphur nutrition in Onion crop | 3 | 3 | 3.6 |
| Varietal Evaluation | Bengalgram | Assessment of potential productivity of BGD-111-01 & DBGV-204 varieties for higher productivity | 5 | 5 | 1.2 ha / trial (Total : 6 ha) |
| Bunch Groundnut | Assessment of TG-37A and DGRMB-24 (drought tolerant varieties) | 3 | 3 | 0.2 |
| Safflower | Assessment of ISF-764 variety for higher productivity | 2 | 2 |  |
| Onion | Assessment of White Onion varieties for higher productivity | 3 | 3 | 1.2 ha / trial (Total : 3.6 ha) |
| Integrated Pest Management |  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |
| Integrated Disease Management |  |  |  |  |  |
|  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |
|  |  |  |  |  |
| Weed Management |  |  |  |  |  |
|  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  |  |
|  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |
|  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |
|  |  |  |  |  |
| Value addition |  |  |  |  |  |
|  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |
|  |  |  |  |  |
| Storage Technique |  |  |  |  |  |
|  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |
|  |  |  |  |  |
| **Total** |  |  | **16** | **16** |  |

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

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

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

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

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

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

**4.B.5. Technologies 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 | Onion storage structures | Assessment of Onion storage methods for domestic purpose | 3 | 1 |
| 8 | Household food security |  |  |  |  |
| 9 | Organic farming |  |  |  |  |
| 10 | Agroforestry management |  |  |  |  |
| 11 | Mechanization |  |  |  |  |
| 12 | Resource conservation technology |  |  |  |  |
| 13 | Value Addition |  |  |  |  |
| 14 | Others |  |  |  |  |

**4.B.6.Technologies assessed under various enterprises for women empowerment : NIL**

|  | **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(Home science) |  |  |  |  |

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

1. **Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Source of technology** | **Yield**  **(Qt/Ha)** | **Unit of yield** | **Observations other than yield**  **(No. of dry root rot affected plants/sq. mt)** | **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** |
| Bengalgram | Protective irrigation | Decrease in the productivity of JG-11 variety | Assessment of BGD-111-01 & DBGV-204  varieties for higher productivity | 3 | **T.O.1 (Farmers’ practice)**  Cultivation of JG-11 variety | - | 8.75 | Qtl/ha | 0.83 | 42875 | 15086 | 1.54 |
| **T.O.2**  Cultivation of JAKI-9218 variety | UAS, Dharwad | 10.07 | Qtl/ha | 0.99 | 49343 | 20606 | 1.72 |
| **T.O.3**  Assessment of BGD-111-01 variety | IARI-RRC, Dharwad | 12.19 | Qtl/ha | 0.49 | 59731 | 30390 | 2.05 |
| **T.O.4**  Assessment of DBGV-204 variety | UAS, Dharwad | 10.71 | Qtl/ha | 0.83 | 52479 | 23500 | 1.82 |

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 |
| Assessment of BGD-111-01 & DBGV-204  varieties for higher productivity | BGD-111-01 variety has higher yield compared to other varieties | * Non-availability of seeds * Less market price |

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

1. **Title of Technology Assessed :** Assessment of BGD-111-01 & DBGV-204 variety for higher productivity

2. **Performance of the Technology on specific indicators**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Technology Assessed** | **Performance indicators** | | | | |
| **Grain Yield (Qtl/ha)** | **Net Returns (Rs./ha)** | **B.C. Ratio** | **% increase in yield** | **No. of pods/plant** |
| **Farmer’s practice:** Cultivation of JG-11 variety | 8.75 | 15086 | 1.54 |  | 37.00 |
| **Recommended practice:** Cultivation of JAKI-9218 variety | 10.07 | 20606 | 1.72 | 15.8 | 39.60 |
| **Alternate practice-1:** Assessment of BGD-111-01 variety | 12.19 | 30390 | 2.05 | 39.31 | 47.60 |
| **Alternate practice-1:** Assessment of DBGV-204 variety | 10.71 | 23500 | 1.82 | 22.40 | 42.30 |

3.**Specific Feedback from farmers:** Yield performance of BGD-111-01 variety is higher than JAKI-9218 variety

4.**Specific Feedback from Extension personnel and other stakeholders:** Make BGD-111-01 variety seeds available to the farmers through KVK &

OFT farmers in higher quantity

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

6. **Feedback on usefulness and constraints of technology :** NIL

1. **Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Source of technology** | **Yield** | **Unit of yield** | **Observations other than yield** | | | **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** | |
| Groundnut | Rainfed condition | Low productivity due to moisture stress caused by long dry spells | Assessment of TG-37A and DGRMB-24 (drought tolerant varieties) | 3 | **T.O.1 (Farmer practice)**  TMV-2 variety |  | 4.84 | Qtl/acre | **No. of pods/plant** | **Duration**  **(Days)** | | 25189 | | 7589 | | 1.43 | |
| 21.20 | 108 | |
| **T.O.2**  GPBD-4 variety | UAS, Dharwad | 5.29 | Qtl/acre | 22.90 | 110 | 27497 | | 9397 | | 1.52 | |
| **T.O.3**  TG-37A variety | Directorate of Groundnut Research, Junagad, Gujarat | 6.24 | Qtl/acre | 28.10 | 113 | 32448 | | 14268 | | 1.78 | |
| **T.O.4**  DGRMB-24 variety | Directorate of Groundnut Research, Junagad, Gujarat | 6.80 | Qtl/acre | 31.60 | 115 | | 35360 | | 17050 | | 1.93 | |

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 |
| Assessment of TG-37A and DGRMB-24 (drought tolerant varieties) | Technologies (Varieties) assessed were performed well under rainfed condition and recorded comparatively higher yield than the local variety. However, these varieties fetched low market price than the local variety. | Higher cost on seed material and cost of cultivation than other crops results in comparatively less income to the farming community. |

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

**1.** Title of Technology Assessed : Assessment of TG-37A and DGRMB-24 (drought tolerant varieties)

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Performance indicators** | | | | | |
| **Pod yield (Qtl/acre)** | **% increase in yield** | **No. of pods per plant** | **Duration (days)** | **Net returns (Rs./acre)** | **B:C ratio** |
| **TO 1:**  **Farmer’s practice:** Cultivation of TMV-2 variety | 4.84 | - | 21.20 | 108 | 7589 | 1.43 |
| **TO 2:**  **Recommended practice:** Cultivation of GPBD-4 variety | 5.29 | 9.16 | 22.90 | 110 | 9397 | 1.52 |
| **TO 3:**  Cultivation of TG-37A variety | 6.24 | 28.80 | 28.10 | 115 | 14268 | 1.78 |
| **TO 4:**  Cultivation of DGRMB-24 variety | 6.80 | 40.37 | 31.60 | 115 | 17050 | 1.93 |

**3.** **Specific Feedback from farmers**  :

Varieties assessed under rainfed condition for drought tolerance have performed well and recorded higher yield than the local variety.

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

Popularization of varieties which recorded higher yield under rainfed condition is need of the hour and seed production programmes should be initiated.

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

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

Technologies (Varieties) assessed were performed well under rainfed condition and recorded comparatively higher yield than the local variety. However, these varieties fetches low market price than the local variety.

\*\* Photographs are attached in JPEG format

1. **Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Source of technology** | **Yield**  **(Qt/Ha)** | **Unit of yield** | **Observations other than yield**  **(**No. of capsules/Plant**)** | **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** |
| Safflower | Rainfed | Low productivity of A-1 variety | Assessment of ISF-764 variety for higher productivity | 3 | **T.O.1 (Farmers’ practice) / Recommended practice**  Cultivation of local A-1 variety | UAS, Dharwad | 11.33 | Qtl. /ha. | 47.3 | 48719 | 24786 | 2.01 |
| **T.O.2**  Assessment of ISF-764 variety | IIOR, Hyderabad | 13.46 | Qtl. /ha | 52.0 | 57878 | 33547 | 2.35 |

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 |
| Assessment of ISF-764 variety for higher productivity | * More number of capsules per plant * Higher grain weight | - |

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

1. **Title of Technology Assessed :** Assessment of ISF-764 variety for higher productivity

2. **Performance of the Technology on specific indicators**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Technology Assessed** | **Performance indicators** | | | | |
| **Grain Yield (Qtl/ha)** | **Net Returns (Rs./ha)** | **B.C. Ratio** | **% increase in yield** | **No. of capsules / plant** |
| **Farmer’s practice:** Cultivation of A-1 variety | 11.33 | 24786 | 2.01 | - | 47.3 |
| **Alternate practice-1:** Assessment of ISF-764 variety | 13.46 | 33547 | 2.35 | 18.79 | 52.0 |

3.**Specific Feedback from farmers:** No. of branches and capsules are more in ISF-764 variety

4.**Specific Feedback from Extension personnel and other stakeholders:** The variety need to be promoted in large area

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

6. Feedback on usefulness and constraints of technology: More number of branches and capsules per plant results iin higher grain yield

1. **Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Source of technology** | **Yield**  **(Qt/Ha)** | **Unit of yield** | **Observations other than yield**  **(Bulb weight in gms)** | **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** |
| Onion | Irrigated | Low yield, keeping quality and income due to cultivation of local variety | Assessment of white Onion varieties for higher productivity | 3 | **T.O.1 (Farmer practice)**  Cultivation of Telagi White | - | 110.00 | Qtl/ha | 103.00 | 132000 | 90380 | 3.17 |
| **T.O.2**  Assessment of Bheema Shubra | ICAR-DOGR, Pune | 140.25 | Qtl/ha | 126.73 | 168300 | 124897 | 3.88 |
| **T.O.3**  Assessment of Bheema Shweta | ICAR-DOGR, Pune | 136.58 | Qtl/ha | 123.10 | 163896 | 120829 | 3.81 |

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 |
| Assessment of Bheema Shubra | Bheema Shubra variety has got uniform bulb size, bright white colour and good marketability. Therefore farmers accepted Bheema Shubra variety | - |

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

1. **Title of Technology Assessed :** Assessment of white Onion varieties for higher productivity

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

| **Technology Assessed** | **Performance indicators** | | |
| --- | --- | --- | --- |
| **Bulb yield (Qtl/ha)** | **Net Returns (Rs./ha)** | **B.C. Ratio** |
| Farmers’ practice: Cultivation of Telagi White | 110 | 90380 | 3.17 |
| Recommended practice: Assessment of Bheema Shubra | 140.25 | 124897 | 3.88 |
| Alternate practice-1: Assessment of Bheema Shweta | 136.58 | 120829 | 3.81 |

1. **Specific Feedback from farmers** : Bheema Shubra variety has got uniform bulb size, bright white colour and good marketability. Therefore farmers accepted Bheema Shubra variety
2. **Specific Feedback from Extension personnel and other stakeholders : --**
3. **Feedback to Research System based on results and feedback received : --**
4. **Feedback on usefulness and constraints of technology:** Bheema Shubra and Bheema Shweta varieties performed better than local variety (Telagi White) in terms of yield, tolerance to thrips and good market price.

\*\* Photographs are attached in JPEG format

1. **Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Source of technology** | **Yield**  **(Qt/Ha)** | **Unit of yield** | **Observations other than yield**  **(Bulb rottening)** | **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** | |
| Onion | Rainfed | Poor bulb quality and low productivity due to imbalanced nutrition | Assessment of Sulphur nutrition in Onion | 3 | **T.O.1 (Farmers’ practice)**  Application of 80:57.5:0 NPK Kg./ha. | - | 28.73 | Qtl/ha | 35.33% | 122102 | 58477 | | 1.91 |
| **T.O.2**  Application of 125:75:125 NPK | UAS, Dharwad & UHS, Bagalkot | 32.80 | Qtl/ha | 29.66% | 147600 | 79792 | | 2.17 |
| **T.O.3**  125:75:125 NPK Kg/ha + 20 Kg Sulphur / ha. and Azospirillum and PSB @ 5 Kg. each /ha. | IARI-RRC, Dharwad | 39.23 | Qtl/ha | 16.33% | 196150 | 126842 | | 2.83 |

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 |
| Assessment of Sulphur Nutrition in Onion crop | Incidence of thrips, purple bloth and bulb rottening is less and bulb weight, bulb diameter and yields are more in case of T.O.3 as compared to T.O.1 and T.O.2 | - |

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

**1.** **Title of Technology Assessed :** Assessment of Sulphur nutrition in Onion

**2.** **Performance of the Technology on specific indicators :** NPK + 20 Kg Sulphur / ha and Azospirrilum and PSB @ 5 Kg/ha in Bheema Super variety of Onoin performed better yield (98.07) and 82.0 Qtl/ha, incidence of thrips (0.60 and 0.86), incidence of purple blotch (9.0% and 12.6), bulb weight (141.0 gm and 127.13 gm) & bulb rottening (16.4% and 29.6%) are recorded in technology assessed and RDF respectively.

**3.Specific Feedback from farmers:** Farmers expressed that the application of Sulphur @ 20 Kg/ha with RDF resulted in more yield & higher returns as well as

low incidence of pest and disease, bulb rottening as compared to RDF & farmers’ practice.

**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: The application of Sulphur @ 20 Kg/ha along with RDF will enahce the yield and net returns in

Onion crop.

\*\* Photographs are attached in JPEG format

1. **Results of On Farm Trial**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop/ enterprise** | **Farming situation** | **Problem definition** | **Title of OFT** | **No. of**  **trials** | **Technology Assessed** | **Source of technology** | **Yield**  **(Qt/Ha)** | **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** |
| Onion storage structures | Rainfed | Lack of awareness on suitable methods of Onion storage for domestic purpose | Assessment of Onion storage methods for domestic purpose | 3 | **T.O.1 (Farmer practice)** | - |  |  | * Rottening of bulbs * Sprouting of bulbs * Blackening of bulbs * Weight loss * Keeping quality |  |  |  |
| **T.O.2:** Hanging of Onions | Farmers’ ITK |  |  |  |  |  |
| **T.O.3:** Small scale Onion storage structure | ICAR-DOGR, Pune |  |  |  |  |  |
| **T.O.3:** Bamboo or steel with perforated trays | UHS, Bagalkot |  |  |  |  |  |

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 |
| Onion storage structures | **Useful characters :**   * Storage capacity is 50 to 70 Kgs * The Onion storage structure is movable * The structure is reusable   **Constraints :**   * Space is required to keep the storage structure | **Socio-economic constraints:**   * Regular monitoring of storage of Onion for checking of spoiled and sprouted onions   **Administrative constraints:**   * Storage structures for smaller quantity of Onions (50 to 70) were not readily available * No subsidy for smaller storage structures |

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

1. **Title of Technology Assessed :** Assessment of Onion storage method for domestic purpose

2. **Performance of the Technology on specific indicators**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Technology options** | **Quantity of Onion taken for trial (Kgs)** | **Spoilt Quantity of Onion** | | | **Total** | **Good bulb quantity for usage** |
| **Rottening of bulbs (Kgs)** | **Blackening of bulbs (Kgs)** | **Sprouting of bulbs (Kgs)** |
| **Farmers Practice:**  Storage of Onions on floor | 35 Kg | 10 | 1 | 11 | 22 | 13 |
| **Recommended Practice:**  Hanging of Onions (ITKs) | 35 Kg | 1 | 0.8 | 4 | 5.8 | 29.2 |
| **Alternate Practice:**  Storage structure made of wooden | 35 Kg | 5 | 1 | 9 | 15 | 20 |
| Storage structure made of Iron | 35 Kg | 7 | 1 | 9 | 17 | 18 |

3.**Specific Feedback from farmers:**

* Storage structure made of wood is good
* The structure can be reused
* The storage structure is costly

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

* The stored Onions can be used during off season
* The structures were not readily available
* Less moisture content and properly dried Onions can be stored for longer period

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

More of sprouting and rottening of bulbs in storage structure compared to farmers’ ITK

6. Feedback on usefulness and constraints of technology:

Usefulness of technology

* The storage structure can be reused
* The stored Onions can be used during off season

Constraints of technology

* Rottening and sprouting of bulbs is more due to high moisture content of bulbs
* The bulbs which are affected by rains during or after harvest are not suitable for storage

\*\* Photographs are attached in JPEG format

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

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

4. D2. Feedback on technologies refined

|  |  |  |
| --- | --- | --- |
| 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:

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** | **Othe**  **rs** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Pulses |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 |  | Rainfed | Kharif | Greengram | DGGV-2 | - | ICM practices | Demonstration of DGGV-2 variety in Greengram crop | 10 | 10 | - | 25 | 14 | 11 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  | Rainfed | Rabi | Rabi Sorghum | SPV- 2217 | - | Varietal demonstration | Demonstration of SPV-2217 |  |  |  |  |  |  |
| 3 |  | Rainfed | Kharif 2021 | Redgram | TS-3R | - | Intercropping system | Maize + Redgram intercropping system with ICM practices | 20 | 20 | 0 | 50 | 35 | 15 |
|  | Millets |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Vegetables | Irrigated | Rabi 2020 | Ridgegourd | Arka Prasan | - | Varietal demonstration | Demonstration of Arka Prasan variety of Ridgegourd crop | 1.0 | 1.0 | 3 | 7 | 8 | 2 |
| 5 |  | Irrigated | Rabi 2020 | Dolichos bean | Hebbal Avare-3 | - | Varietal demonstration | Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | 1.2 | 1.2 | 2 | 4 | 4 | 2 |
| 6 |  | Irrigated | Kharif 2021 | Green chilli | Nagavi Giddakayi | - | Integrated Crop Management | Integrated Crop Management in Green Chilli | 6.4 | 6.4 | 2 | 14 | 16 | 0 |
| 7 |  | Irrigated | Rabi 2020 | Seed production enterprise | Bheema Super | - | Seed Production Enterprise | Demonstration of seed production enterprise in Red onion variety Bheema Super | 2.0 | 2.0 | 0 | 5 | 0 | 5 |
| 8 | Flowers | Irrigated | Kharif 2021 | Chrysanthemum | Kurnool | - | Integrated Crop Management | ICM in Chrysanthemum crop | 2.0 | 2.0 | 5 | 15 | 17 | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fruit |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Spices and condiments | Rainfed | Kharif 2021 | Red chilli | Byadagi chilli | - | Integrated Disease Management | Integrated Pest and Disease Management in red chilli variety Byadagi Chilli | 6.0 | 6.0 | 0 | 15 | 3 | 12 |
|  | Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Fodder | Irrigated | Kharif | Perennial fodder crops | Hybrid Napier-DHN 6, Multicut Jowar-VH-988,  Guinea grass,  Rhodes grass,  Signal grass:  Lucerne,  Stylosanthes Hamata 555 & Stylo Scabra seeds, Subabul K8/B-42 & Sesbania grandiflora & Fodder oats | - | Nutrition Management in dairy animals | Demonstration on Fodder Production & feeding to milch animals for enhanced milk productivity | 1 | 1 | 0 | 10 | 10 | - |
|  | Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Dairy |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Piggery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Common carps |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mussels |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental fishes |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Implements |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Others (specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Nutri farm | Irrigated & Rainfed | All seasons | Vegetables | - | - | Nutrition | Demonstration of Nutri farm | - | - | 2 | 23 | 25 | 0 |
| 12 | PHT |  |  | Red Chilli |  |  | PHT | Demonstration of solar drier for drying of Red chillies | - | - | 0 | 3 | 3 | 0 |

**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 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Pulses | Rainfed | Kharif, 2021 | Greengram | DGGV-2 | - | Integrated Crop Management | Integrated Crop Management in DGGV-2 variety | Kharif, 2021 | L | L | M | Maize, Bt.Cotton, Spreading Groundnut |
|  | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  | Rainfed | Kharif 2021 | Redgram | TS-3R | - | Intercropping system | Maize+Redgram intercropping system with ICM practices | Kharif 2021 | L | L | M | Groundnut |
| 3 |  | Rainfed | Rabi 2020 | Rabi Sorghum | SPV-2217 | - | ICM | Demonstration of SPV-2217 variety | Rabi  2020 | L | L | H | Greengram & fallow land |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Millets |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Vegetables | Irrigated | Rabi 2020 | Ridgegourd | Arka Prasan | - | Varietal demonstration | Demonstration of Arka Prasan variety of Ridgegourd crop | Rabi 2020 | L | L | M | Greengram |
| 6 |  | Irrigated | Rabi 2020 | Dolichos bean | Hebbal Avare-3 | - | Varietal demonstration | Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | Rabi 2020 | L | L | M | Greengram |
| 7 |  | Irrigated | Rabi 2020 | Green chilli | Nagavi Giddakayi | - | Integrated Crop Management | Integrated Crop Management in Green Chilli | Rabi 2020 | L | L | M | Vegetable crops |
| 8 |  | Irrigated | Rabi 2020 | Seed production enterprise | Bheema Super | - | Seed Production Enterprise | Demonstration of seed production enterprise in Red onion variety Bheema Super | Rabi 2020 | L | L | M | Greengram |
| 9 | Flowers | Irrigated | Kharif, 2021 | Chrysanthemum | Kurnool | - | Integrated Crop Management | ICM in Chrysanthemum crop | Kharif, 2021 | L | L | M | Vegetable crops |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fruit |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Spices and condiments | Rainfed | Kharif, 2021 | Red chilli | Byadagi chilli | - | Integrated Disease Management | Integrated Pest and Disease Management in red chilli variety Byadagi Chilli | Kharif, 2021 | L | L | M | Rabi Sorghum |
|  | Commercial |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Fodder | Irrigated | Kharif 2021 | Perennial Fodder crops | Hybrid Napier-DHN 6, Multicut Jowar-VH-988,  Guinea grass,  Rhodes grass,  Signal grass:  Lucerne,  Stylosanthes Hamata 555 & Stylo Scabra seeds, Subabul K8/B-42 & Sesbania grandiflora & Fodder oats | - | Nutrition Management in dairy animals | Demonstration on Fodder Production | Kharif 2021 | L | L | M | Maize |
|  | Plantation |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |

**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)** | | | | | | | **% Incre-ase** | **\*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** |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | |  | |  |
| Greengram | Demonstration of DGGV-2 variety in Greengram crop (ICM practices) | DGGV-2 | - | Rainfed | 25 | 10 | 15.87 | | 9.65 | | 12.96 | | 9.36 | 38.52 | 80352 | | 55018 | 3.17 | | 58007 | | 34568 | | 2.47 |
| **Cereals** |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | |  | |  |
| Rabi Sorghum | Demonstration of SPV-2217 variety | SPV-2217 | - | Rainfed | 30 | 12 | 22.0 | | 8.50 | | 12.52 | | 9.91 | 26.33 | 35682 | | 14850 | 1.69 | | 29668 | | 10411 | | 1.52 |
| Maize+ Redgram | Maize+ Redgram intercropping system with ICM practices | TS-3R in Redgram | CP-848 in Maize | Rainfed | 50 | 20 | Maize: 44.50  +  Redgram: 8.00 | | Maize:39.8  +  Redgram: 5.75 | | Maize:43.08  +  Redgram: 6.77 | | 49.46 | - | 94160 | | 54478 | 2.38 | | 69237 | | 33998 | | 1.97 |
| Vegetables | Demonstration of Arka Prasan variety of Ridgegourd crop | Arka Prasan | - | Irrigated | 10 | 1.0 | 138.00 | | 102.00 | | 119.16 | | 93.24 | 27.79 | 202572 | | 113412 | 2.27 | | 158508 | | 80218 | | 2.02 |
|  | Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | Hebbal Avare-3 | - | Irrigated | 06 | 1.2 | 47.50 | | 41.25 | | 44.38 | | 37.08 | 19.66 | 88750 | | 47000 | 2.13 | | 74167 | | 34592 | | 1.87 |
|  | Integrated Crop Management in Green Chilli | Nagavi Giddakaayi | - | Irrigated | 16 | 6.4 | 91.00 | | 61.25 | | 75.20 | | 57.97 | 29.72 | 451172 | | 314891 | 3.33 | | 347813 | | 220297 | | 2.74 |
|  | Demonstration of seed production enterprise in Red onion variety Bheema Super | Bheema Super | - | Irrigated | 05 | 2.0  Bulb production | 57.50 | | 38.75 | | 49.84 | | - | - | 139563 | | 80358 | 2.36 | | - | | - | | - |
| 1.0  Seed production | 7.00 | | 5.00 | | 5.81 | | - | - | 871875 | | 717263 | 5.65 | | - | | - | | - |
| **Flowers** | ICM in Chrysanthemum crop | Kurnool | - | Irrigated | 20 | 2.0 | 71.25 | | 51.25 | | 61.41 | | 49.14 | 24.97 | 399189 | | 258829 | 2.84 | | 319394 | | 190420 | | 2.48 |
| Ornamental |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  |  | |  | |  | |  | |  |  |  |  | |  | | |  |
| **Fruit** |  |  |  |  |  |  |  |  | |  | |  | |  | |  |  |  |  | |  | | |  |
| **Spices and condiments** | Integrated Pest and Disease Management in red chilli variety Byadagi Chilli | Byadagi chilli | - | Rainfed | 15 | 6.0 | The whole crop affected due to heavy rainfall | | | | | | | | | | | | | | | | | |
| Commer  cial |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
| Fibre crops like cotton |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
| **Medicinal and aromatic** |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
| Fodder |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
| Plantation |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
| Fibre |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
|  |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  | |  | |  | |  |  |  | |  |  | |  | | |  |  |

\*\* BCR= GROSS RETURN/GROSS COST

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

\* Ashwagandha crop demonstration does not have local check as this crop is a new introduction during rabi season. Hence, this is compared with Bengalgram crop as local check to show that Ashwagandha is more profitable compared to traditional rabi season crop i.e Bengalgram

1. **Data on additional parameters other than yield : Demonstration of DGGV-2 variety in Greengram crop**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Plant height (cm) | 39.53 | 34.99 |
| No. of pods per plant | 30.46 | 24.33 |

1. **Data on additional parameters other than yield : Demonstration of Maize+Regram intercropping system**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| 1000 grains weight of Maize | 175.04 | 152.45 |
| 100 grain weight of Redgram | 10.38 | - |

1. **Data on additional parameters other than yield : Demonstration of SPV-2217 variety in Rabi Sorghum**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Lodging of plants (Percentage) at harvest | 11.26 | 23.03 |

1. **Data on additional parameters other than yield : ICM in Chrysanthemum**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Flower bud borer (nos./plant) | 0.53 | 1.09 |
| Leaf spot incidence (%) | 8.00 | 18.66 |

1. **Data on additional parameters other than yield : ICM in Ridgegourd variety Arka Prasan**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Days for first fruits picking | 45 days | 56 days |
| Average number of fruits per vine | 11.38 | 9.42 |
| Average fruit weight (gms) | 111.35 | 99.76 |

5. B2. Feedback 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 |
| --- | --- | --- |
| Demonstration of DGGV-2 variety in Greengram crop (ICM practices) | Since the demonstrated variety of Greengram (DGGV-2) is of non-shattering type, it suits well for mechanical harvesting. There are no such constraints in the cultivation of demonstrated variety. | - |
| Maize + Redgram intercropping system with ICM technology | The Maize + Redgram intercropping system is suitable for dryland area to enhance the income of the farmers | - |
| Bt.Cotton + Redgram intercropping system with ICM technology | The Bt.Cotton + Redgram intercropping system is suitable for dryland area to enhance the income for the farmers |  |
| Demonstration of Arka Prasan variety of Ridgegourd crop | Arka Prasan is   * An early variety, * Gives more yield * Low incidence of powdery mildew compared to local variety * Fruits are tender with good taste and cooking quality | - |
| Demonstration of Hebbal Avare-3 variety of Dolichos bean crop | Hebbal Avare-3   * Good yielding variety * Tender pods and seeds preferred by consumers |  |
| Integrated Crop Management in Green Chilli | * Application of neem cake and *Trichoderma viridae* reduces the incidence of damping off in nursery seedlings * Application of Arka microbial consortium during transplating and 45 days after transplanting helps in better crop stand. * Timely management of anthracnose, Murda complex disease will enhance the quality and yield of green chilli crop   Constraints   * Cost of the neem cake is more | - |
| Demonstration of seed production enterprise in Red onion variety Bheema Super | Seed production of onion variety Bheema Super   * To avail pure seeds of improved varieties to farmers * To become seed production entrepreneur for better income | - |
| ICM in Chrysanthemum crop | * Foliar spray of Micronutrients at vegetative growth stage, at 25% flower opening and and 20 days after second spray helps in complete opening of flowers and tight buds with bright coloured flowers having good shelflife. * Application of neem cake at the time of transplanting helps in managing of flower bud borer and soil born pests * Timely management of foliar fungal disease contributes for better crop stand and quality flower production.   Constraints   * Cost of the neem cake is more | - |

5.B.3. Livestock and related enterprises

| **Type of livestock** | **Name of the technology demonstrated** | **Breed** | **No. of Demo** | **No.**  **of Units** | **Yield (kg/animal)** | | | | **% Increase** | **\*Economics of demonstration Rs./unit)** | | | | **\*Economics of check**  **(Rs./unit)** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Demo** | | | **Check if any** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** |
|  |  |  |  |  | H | L | A |  |  |  |  |  |  |  |  |  |  |
| Dairy | Demonstration on Fodder Production | CB Cows | 10 | 10 | 14 | 7.1 | 9.87 | 8.6 | 14.76 | 26710 | 79947 | 65387 | 2.99 | 43075 | 69660 | 26585 | 1.61 |
| Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheep and goat | Upgradation of local sheep with Nari Suvarna Ram | Nari Suvarna | 1 | 10 animals | 17.5 | 15.5 | 16.33 | 11.32 | 44.25 | 368 | 6532 | 6164 | 17.75 | 368 | 4528 | 4273 | 12.30 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*\* 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.)**

**FLD on Fodder production**

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

Data on additional parameters : Demonstration on Fodder production

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration** | **Check** |
| Feeding of Fodder | * Gradual improvement in the general condition of the animal health * Increase in intake of dry fodder * Cows are coming to heat within the period | - |
| Nutrition | Proper nutrition | No systematic nutrition |

**FLD on upgradation of local sheep with nari suvarna breed**

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

Data on additional parameters : Demonstration on upgradation of local sheep with nari suvarna breed

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration** | **Check** |
| Average body weight gain (Kgs./) | 16.33 Kgs. | 11.32 Kgs. |
| % of twins lambing | 20 | 0 |

5. B4. Feedback on livestock technologies demonstrated

|  |  |  |
| --- | --- | --- |
| Name of livestock technology demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
| FLD on Fodder production | After production and feeding of perennial green fodder, and grasses and azolla to milking cow, there was   * Enhanced intake of fodder * Increased Milk production * Improvement in health condition and reduced intake of cattle feed | - |

5.B.5. Fisheries : NIL

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

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

\*\* BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5. B6. Feedback on fisheries technologies demonstrated

|  |  |  |
| --- | --- | --- |
| 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

| **Enterprise** | **Name of the technology demonstrated** | **Variety/ species** | **No. of Demo** | **Units/ Area {m2}** | **Name of the parameter with unit** | **Yield (Qtl/ha)** | | | | **% 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) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nutrition & Health | Demonstration of Nutri-farm | - | 25 | 4552.65 Sq.mts | * Amount spent towards purchase of vegetables/year * Percentage adequacy of vegetables * Availability of leafy vegetables, other vegetables and roots and tubers per day/ member | - | - | - | - | - | 85976 | 43476 | 2.02 | - | - | - |
| Post Harvest Technology | Demonstration of Solar drier for drying of Red Chillies | - | 3 |  | * No. of days required for drying of chillies * Quantity of dry chillies obtained after drying (Kg) * Moisture removal rate (Kg/day) * Moisture content in Chilli powder (%) * Aflatoxin content in Chilli powder (mg/Kg) | - | - | - | - | - | - | - | - | - | - | - |

\*\* BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

**Data on additional parameters other than yield : Health & Nutrition**

|  |  |  |
| --- | --- | --- |
| Data on other parameters in relation to technology demonstrated | | |
| **Parameter with unit** | **Demo** | **Local** |
| Amount spent towards purchase of vegetables/year | Rs.3600  (Rs.300/month) | 19200 (Rs.1600/month) |
| Percentage adequacy of vegetables | 35.40 | - |
| Availability of leafy vegetables, other vegetables and roots and tubers per day/ member (gms) | 177 | - |

**Data on additional parameters other than yield : Post Harvest Technology (Solar drier)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data on other parameters in relation to technology demonstrated | | | | |
| **Parameter with unit** | **Demo** | | **Local** | |
|  | Byadagi Kaddi | Byadagi Dabbi | Byadagi Kaddi | Byadagi Dabbi |
| Quantity of chillies taken (Kg) | 24 | 24 | 24 | 24 |
| Number of days required for drying of Byadagi Kaddi Chilli | 4 | 5 | 9 | 10 |
| Quantity of dried chillies obtained after drying (Kg) | 8.5 | 9.18 | 7.9 | 8.14 |
| Moisture removal rate (Kg/day) | 3.87 | 2.96 | 1.79 | 1.58 |
| Minimum and maximum temperature recorded | 300C-510C | | 280C-300C | |
| Moisture content in Byadagi Kaddi chilli powder (%) | 2.5 | | 4.5 | |
| Aflatoxin content (mg/Kg) | 0 | | 0 | |

**5. B8. 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 |
| --- | --- | --- |
| Nutrition Garden | Useful characters :   * Fresh vegetables were available to families * Cost incurred for purchase of vegetables has been reduced * All family members including children came to know about the cultivation of various vegetables * Exchange of vegetables with neighbors and friends   Constraints :   * Water problem and heavy rainfall * Management of pest and diseases | Socio-economic constraints   * Due to small land holding, many families may show dis-interest in cultivation of vegetables in smaller quantity * Lack of resources * Fencing problem * Damage of Nutri-Garden occurs due to stray cattles and livestock   Administrative constraints   * No government facilities for planting of fruit plants * Lack of backyard space |
| Solar drier | Useful characters :   * Drying is uniform and faster * Chillies are free from dust, mud and other particles * Labour requirement is less   Constraints :   * Not suitable for big farmers * Small quantities can be dried * Susceptable to damage during transportation * Non uniformity of solar intensity | Socio-economic constraints   * Damage of solar drier during drying due to monkeys and cattles * Machine is costly * Durability of drier is less. Problem of damage of solar panel.   Administrative constraints   * No subsidy from Government for small machines * More space required for tunnel drier (Large scale) * High investment for installation * Lack of interest by farmers |

**5.B.9. Farm implements and machinery**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of the implement | Cost of the implement in Rs. | Name of the technology demonstrated | No. of Demo | Area covered under demo  in ha | Labour requirement in Mandays | | % save | Savings in labour (Rs./ha) | \*Economics of demonstration (Rs./ha) | | | | \*Economics of check  (Rs./ha) | | | |
| Demo | Check | Cost incurred for grading and cleaning | | | | Cost incurred for grading and cleaning | | | |
|  |  |  |  |  |  |  |  |  |  | | | |  | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* 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. B10. 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.11. Extension and Training activities under FLD**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Activity** | **No. of activities organised** | **Number of participants** | **Remarks** |
| 1 | Field days | 10 | 469 | - |
| 2 | Farmers Training | 62 | 1793 | - |
| 3 | Media coverage | 12 | - | - |
| 4 | Training for extension functionaries | 9 | 364 | - |
| 5 | Others (Please specify) |  |  |  |

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS**

**Demonstration details on crop hybrids : NIL**

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

**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 |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems | 2 | 48 | 0 | 48 | 10 | 0 | 10 | 58 | 0 | 58 |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming | 1 | 0 | 41 | 41 | 0 | 11 | 11 | 0 | 52 | 52 |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 22 | 324 | 84 | 408 | 266 | 21 | 287 | 590 | 105 | 695 |
| Soil and Water Conservation | 1 | 66 | 0 | 66 | 31 | 0 | 31 | 97 | 0 | 97 |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs | 2 | 45 | 28 | 73 | 15 | 12 | 27 | 60 | 40 | 100 |
| 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) |  |  |  |  |  |  |  |  |  |  |
| Production technology | 4 | 38 | 48 | 86 | 26 | 17 | 43 | 64 | 65 | 129 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 1 | 30 | 0 | 30 | 5 | 0 | 5 | 35 | 0 | 35 |
| Management of young plants/orchards | 1 | 77 | 18 | 95 | 20 | 0 | 20 | 97 | 18 | 115 |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Integrated Horticulture System | 1 | 0 | 13 | 13 | 0 | 14 | 14 | 0 | 27 | 27 |
| **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 | 1 | 39 | 0 | 39 | 6 | 0 | 6 | 45 | 0 | 45 |
| 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 | 2 | 105 | 22 | 127 | 39 | 13 | 52 | 144 | 35 | 179 |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology in Ashwagandha crop | 1 | 6 | 4 | 10 | 0 | 0 | 0 | 6 | 4 | 10 |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | 5 | 219 | 31 | 250 | 28 | 8 | 36 | 247 | 39 | 286 |
| Integrated water management | 1 | 67 | 6 | 73 | 7 | 0 | 7 | 74 | 6 | 80 |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers | 1 | 40 | 2 | 42 | 6 | 3 | 9 | 46 | 5 | 51 |
| Soil and water testing | 1 | 34 | 3 | 37 | 7 | 3 | 10 | 41 | 6 | 47 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Rain water harvesting and conservation | 1 | 18 | 12 | 30 | 8 | 7 | 15 | 26 | 19 | 45 |
| Climate resilient technologies in agriculture crops | 1 | 0 | 20 | 20 | 0 | 15 | 15 | 0 | 35 | 35 |
| Soil and water conservation | 1 | 66 | 0 | 66 | 31 | 0 | 31 | 97 | 0 | 97 |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 1 | 0 | 19 | 19 | 0 | 11 | 11 | 0 | 30 | 30 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology | 1 | 17 | 14 | 31 | 7 | 4 | 11 | 24 | 18 | 42 |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Scientific Sheep and Goat management |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening | 7 | 38 | 152 | 190 | 10 | 31 | 41 | 48 | 183 | 231 |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet | 1 | 0 | 125 | 125 | 0 | 0 |  | 0 | 125 | 125 |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition | 2 | 15 | 73 | 88 | 7 | 13 | 20 | 22 | 86 | 108 |
| Women empowerment | 1 | 0 | 29 | 29 | 0 | 4 | 4 | 0 | 33 | 33 |
| Location specific drudgery production | 1 | 0 | 40 | 40 | 0 | 11 | 11 | 0 | 51 | 51 |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| EDP for women | 1 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 5 | 5 |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance | 1 | 0 | 15 | 15 | 0 | 10 | 10 | 0 | 25 | 25 |
| 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 | 2 | 52 | 17 | 69 | 6 | 0 | 6 | 58 | 17 | 75 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 1 | 15 | 0 | 15 | 0 | 0 | 0 | 15 | 0 | 15 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Organic farming |  |  |  |  |  |  |  |  |  |  |
| **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 | 4 | 0 | 0 | 0 | 0 | 123 | 123 | 0 | 123 | 123 |
| 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) |  |  |  |  |  |  |  |  |  |  |
| Sensitisation on farm bills |  |  |  |  |  |  |  |  |  |  |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies | 3 | 70 | 68 | 138 | 15 | 29 | 44 | 85 | 97 | 182 |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems | 2 | 15 | 33 | 48 | 6 | 11 | 17 | 21 | 44 | 65 |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **78** | **1444** | **922** | **2366** | **556** | **371** | **927** | **2000** | **1293** | **3293** |

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

| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  |  |  |  |  |  |  |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 6 | 108 | 14 | 122 | 23 | 0 | 23 | 131 | 14 | 145 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| ICM in vegetables | 2 | 13 | 3 | 16 | 9 | 2 | 11 | 22 | 5 | 27 |
| Post harvest management in Onion seed production | 1 | 13 | 0 | 13 | 2 | 0 | 2 | 15 | 0 | 15 |
| Organic farming in vegetables and flowers | 1 | 15 | 0 | 15 | 10 | 0 | 10 | 25 | 0 | 25 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit |  |  |  |  |  |  |  |  |  |  |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management |  |  |  |  |  |  |  |  |  |  |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management |  |  |  |  |  |  |  |  |  |  |
| Integrated water management | 2 | 80 | 6 | 86 | 15 | 0 | 15 | 95 | 6 | 101 |
| Integrated nutrient management | 9 | 206 | 33 | 239 | 42 | 17 | 59 | 248 | 50 | 298 |
| Production and use of organic inputs | 2 | 15 | 12 | 27 | 33 | 3 | 36 | 48 | 15 | 63 |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers | 1 | 20 | 0 | 20 | 6 | 0 | 6 | 26 | 0 | 26 |
| Soil and water testing | 2 | 39 | 0 | 39 | 12 | 0 | 12 | 51 | 0 | 51 |
| 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 | 2 | 3 | 42 | 45 | 0 | 4 | 4 | 3 | 46 | 49 |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet | 1 | 0 | 20 | 20 | 0 | 5 | 5 | 0 | 25 | 25 |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques | 1 | 10 | 2 | 12 | 0 | 4 | 4 | 10 | 6 | 16 |
| Value addition | 1 | 0 | 13 | 13 | 0 | 0 | 0 | 0 | 13 | 13 |
| Women empowerment | 2 | 0 | 36 | 36 | 0 | 3 | 3 | 0 | 39 | 39 |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Kitchen waste management | 1 | 4 | 35 | 39 | 0 | 0 | 0 | 4 | 35 | 39 |
| Protective clothing during agricultural operation | 2 | 5 | 19 | 24 | 1 | 5 | 6 | 6 | 24 | 30 |
| **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 | 1 | 5 | 10 | 15 | 0 | 10 | 10 | 5 | 20 | 25 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 7 | 116 | 2 | 118 | 43 | 0 | 43 | 159 | 2 | 161 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Integrated pest and disease management |  |  |  |  |  |  |  |  |  |  |
| Organic farming |  |  |  |  |  |  |  |  |  |  |
| **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) |  |  |  |  |  |  |  |  |  |  |
| FPO formation process and activities | 1 | 74 | 0 | 74 | 19 | 0 | 19 | 93 | 0 | 93 |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems | 1 | 20 | 2 | 22 | 3 | 0 | 3 | 23 | 2 | 25 |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **46** | **746** | **249** | **995** | **218** | **53** | **271** | **964** | **302** | **1266** |

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

| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Nursery Management of Horticulture crops |  |  |  |  |  |  |  |  |  |  |
| Training and pruning of orchards |  |  |  |  |  |  |  |  |  |  |
| Protected cultivation of vegetable crops |  |  |  |  |  |  |  |  |  |  |
| Commercial fruit production |  |  |  |  |  |  |  |  |  |  |
| Integrated farming |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Planting material production |  |  |  |  |  |  |  |  |  |  |
| Vermi-culture |  |  |  |  |  |  |  |  |  |  |
| Mushroom Production |  |  |  |  |  |  |  |  |  |  |
| Bee-keeping |  |  |  |  |  |  |  |  |  |  |
| Sericulture |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Small scale processing |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology | 1 | 10 | 12 | 22 | 4 | 3 | 7 | 14 | 15 | 29 |
| Tailoring and Stitching |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Dairying | 9 | 114 | 59 | 173 | 52 | 8 | 60 | 166 | 67 | 233 |
| Sheep and goat rearing | 2 | 50 | 1 | 51 | 6 | 0 | 6 | 56 | 1 | 57 |
| Quail farming |  |  |  |  |  |  |  |  |  |  |
| Piggery |  |  |  |  |  |  |  |  |  |  |
| Rabbit farming |  |  |  |  |  |  |  |  |  |  |
| Poultry production | 1 | 17 | 1 | 18 | 2 | 0 | 2 | 19 | 1 | 20 |
| 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) |  |  |  |  |  |  |  |  |  |  |
| Communication skills | 1 | 17 | 13 | 30 | 2 | 4 | 6 | 19 | 17 | 36 |
| **TOTAL** | **14** | **208** | **86** | **294** | **66** | **15** | **81** | **274** | **101** | **375** |

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

| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Nursery Management of Horticulture crops |  |  |  |  |  |  |  |  |  |  |
| Training and pruning of orchards |  |  |  |  |  |  |  |  |  |  |
| Protected cultivation of vegetable crops |  |  |  |  |  |  |  |  |  |  |
| Commercial fruit production |  |  |  |  |  |  |  |  |  |  |
| Integrated farming |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Planting material production |  |  |  |  |  |  |  |  |  |  |
| Vermi-culture |  |  |  |  |  |  |  |  |  |  |
| Mushroom Production |  |  |  |  |  |  |  |  |  |  |
| Bee-keeping |  |  |  |  |  |  |  |  |  |  |
| Sericulture |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Small scale processing |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Tailoring and Stitching |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Dairying | 1 | 10 | 19 | 29 | 1 | 4 | 5 | 11 | 23 | 34 |
| 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) |  |  |  |  |  |  |  |  |  |  |
| Entrepreneurship Development Programme |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **1** | **10** | **19** | **29** | **1** | **4** | **5** | **11** | **23** | **34** |

**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 | 2 | 50 | 6 | 56 | 5 | 0 | 5 | 55 | 6 | 61 |
| Integrated Pest Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient management |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Women and Child care |  |  |  |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing | 2 | 1 | 44 | 45 | 0 | 12 | 12 | 1 | 56 | 57 |
| Group Dynamics and farmers organization |  |  |  |  |  |  |  |  |  |  |
| Information networking among farmers |  |  |  |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  |  |  |  |  |  |  |  |  |
| Management in farm animals | 1 | 30 | 9 | 39 | 0 | 0 | 0 | 30 | 9 | 39 |
| Livestock feed and fodder production |  |  |  |  |  |  |  |  |  |  |
| Household food security | 1 | 0 | 20 | 20 | 0 | 2 | 2 | 0 | 22 | 22 |
| **Any other (pl.specify)** |  |  |  |  |  |  |  |  |  |  |
| Intercropping sytems in Kharif crops | 1 | 57 | 0 | 57 | 21 | 0 | 21 | 78 | 0 | 78 |
| Health and Nutri Garden |  |  |  |  |  |  |  |  |  |  |
| Animal Husbandry technologies for doubling of farmers’ income | 1 | 36 | 2 | 38 | 10 | 0 | 10 | 46 | 2 | 48 |
| Disease management in milch animals | 1 | 38 | 2 | 40 | 17 | 5 | 22 | 55 | 7 | 62 |
| Post harvest management in Rabi crops | 1 | 41 | 4 | 45 | 0 | 0 | 0 | 41 | 4 | 45 |
| **Total** | **10** | **253** | **87** | **340** | **53** | **19** | **72** | **306** | **106** | **412** |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Productivity enhancement in field crops |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient management |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Women and Child care |  |  |  |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing |  |  |  |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization | 2 | 65 | 4 | 69 | 3 | 0 | 3 | 68 | 4 | 72 |
| Information networking among farmers |  |  |  |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  |  |  |  |  |  |  |  |  |
| Management in farm animals |  |  |  |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  |  |  |  |  |  |  |  |  |
| Good food & nutrition garden |  |  |  |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Total** | **2** | **65** | **4** | **69** | **3** | **0** | **3** | **68** | **4** | **72** |

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 | 8 | 14 | 60 | 74 | 152 | 44 | 196 | 166 | 104 | 270 |
| 1.b. | Commercial production of vegetables | 1 | 0 | 43 | 43 | 0 | 17 | 17 | 0 | 60 | 60 |
| **2** | **Production and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Fruit Plants | 1 | 0 | 13 | 13 | 0 | 12 | 12 | 0 | 25 | 25 |
| 2.b. | Ornamental plants |  |  |  |  |  |  |  |  |  |  |
| 2.c. | Spices crops |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Soil health and fertility management** | 1 | 0 | 20 | 20 | 0 | 15 | 15 | 0 | 35 | 35 |
| **4** | **Production of Inputs at site** | 1 | 19 | 4 | 23 | 5 | 2 | 7 | 24 | 6 | 30 |
| **5** | **Methods of protective cultivation** |  |  |  |  |  |  |  |  |  |  |
| **6** | **Others (pl.specify)** |  |  |  |  |  |  |  |  |  |  |
|  | Soil and water conservation |  |  |  |  |  |  |  |  |  |  |
| **7** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 7.a. | Processing and value addition | 3 | 52 | 60 | 112 | 6 | 7 | 13 | 58 | 67 | 125 |
| 7.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| **8** | **Farm machinery** |  |  |  |  |  |  |  |  |  |  |
| 8.a. | Farm machinery, tools and implements | 1 | 0 | 15 | 15 | 0 | 10 | 10 | 0 | 25 | 25 |
| 8.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **9.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| **10** | **Livestock production and management** |  |  |  |  |  |  |  |  |  |  |
| 10.a. | Animal Nutrition Management | 1 | 0 | 19 | 19 | 0 | 11 | 11 | 0 | 30 | 30 |
| 10.b. | Animal Disease Management | 1 | 38 | 2 | 40 | 17 | 5 | 22 | 55 | 7 | 62 |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | Scientific dairy management | 2 | 25 | 4 | 29 | 16 | 0 | 16 | 41 | 4 | 45 |
|  | Animal Husbandry technologies for DFI | 1 | 39 | 2 | 41 | 10 | 0 | 10 | 49 | 2 | 51 |
|  | Scientific management of sheep & goat | 1 | 27 | 1 | 28 | 3 | 0 | 3 | 30 | 1 | 31 |
| **11.** | **Home Science** |  |  |  |  |  |  |  |  |  |  |
| 11.a. | Household nutritional security |  |  |  |  |  |  |  |  |  |  |
| 11.b. | Economic empowerment of women |  |  |  |  |  |  |  |  |  |  |
| 11.c. | Drudgery reduction of women | 1 | 0 | 40 | 40 | 0 | 11 | 11 | 0 | 51 | 51 |
| 11.d. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **12** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 12.a. | Capacity Building and Group Dynamics |  |  |  |  |  |  |  |  |  |  |
| 12.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | Animal Husbandry technologies for DFI |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |
|  | Integrated Farming system | 2 | 0 | 58 | 58 | 0 | 19 | 19 | 0 | 77 | 77 |
|  | **Total** | **25** | **214** | **341** | **555** | **209** | **153** | **362** | **423** | **494** | **917** |

**Details of sponsoring agencies involved**

1. Dept of Animal Husbandry and Veterinary Sciences
2. IIOR, Hyderabad
3. ATMA
4. ASCI
5. SBI-ASF RSETI, Hulkoti
6. SCSP
7. SKDRDP

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. 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 | 2 | 27 | 7 | 34 | 10 | 0 | 10 | 37 | 7 | 44 |
| 3.b. | Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| 3.c. | Sheep and goat rearing | 1 | 27 | 1 | 28 | 3 | 0 | 3 | 30 | 1 | 31 |
| 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** | **3** | **54** | **8** | **62** | **13** | **0** | **13** | **67** | **8** | **75** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.**  **No.** | **Name of Job Role** | **Date**  **of Start** | **Date**  **of**  **Assessment** | **Total**  **Expenditure**  **(Rs.)** | **No. of Participants** | | | | | | | | | **No of Participants passed**  **assessment** |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 1. | Dairy Entrepreneur | 06-03-2021 | 31-03-2021 | 263500 | 16 | 5 | 21 | 4 | 0 | 4 | 21 | 5 | 25 | 25 |

**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** |
| Field Day | 16 | 579 | 68 | 647 | 164 | 22 | 186 | 20 | 7 | 27 |
| Kisan Mela | 1 | 11 | 0 | 11 | 76 | 0 | 76 | 2 | 1 | 3 |
| Kisan Ghosthi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exhibition | 3 | 1622 | 361 | 1983 | 70 | 4 | 74 | 38 | 22 | 60 |
| Film Show | 4 | 41 | 36 | 77 | 11 | 0 | 11 | 3 | 1 | 4 |
| Method Demonstrations | 11 | 147 | 22 | 169 | 43 | 5 | 48 | 15 | 2 | 17 |
| Farmers Seminar | 2 | 132 | 55 | 187 | 43 | 30 | 73 | 10 | 5 | 15 |
| Workshop | 1 | 0 | 0 | 0 | 17 | 5 | 22 | 38 | 2 | 40 |
| Group meetings | 19 | 300 | 41 | 341 | 156 | 18 | 174 | 13 | 8 | 21 |
| Lectures delivered as resource persons | 2 | 20 | 29 | 49 | 0 | 23 | 23 | 2 | 2 | 4 |
| Advisory Services | 128 | 121 | 7 | 128 | 0 | 0 | 0 | 3 | 5 | 8 |
| Scientific visit to farmers field | 111 | 800 | 148 | 948 | 3 | 0 | 3 | 29 | 7 | 36 |
| Farmers visit to KVK | 354 | 517 | 264 | 781 | 12 | 11 | 23 | 5 | 5 | 10 |
| Diagnostic visits | 14 | 46 | 5 | 51 | 0 | 0 | 0 | 8 | 3 | 11 |
| Exposure visits | 3 | 73 | 22 | 95 | 4 | 3 | 7 | 2 | 1 | 3 |
| Ex-trainees Sammelan | 0 |  |  |  |  |  |  |  |  |  |
| Soil health Camp | 0 |  |  |  |  |  |  |  |  |  |
| Animal Health Camp | 0 |  |  |  |  |  |  |  |  |  |
| Agri mobile clinic | 0 |  |  |  |  |  |  |  |  |  |
| Soil test campaigns | 0 |  |  |  |  |  |  |  |  |  |
| Farm Science Club meetings | 0 |  |  |  |  |  |  |  |  |  |
| Self Help Group meetings | 0 |  |  |  |  |  |  |  |  |  |
| Mahila Mandals meetings | 0 |  |  |  |  |  |  |  |  |  |
| **Celebration of important days (specify)** |  |  |  |  |  |  |  |  |  |  |
| International Women's Day | 1 | 0 | 89 | 89 | 0 | 23 | 23 | 22 | 15 | 37 |
| Vigilance awareness week | 1 | 145 | 25 | 170 | 5 | 5 | 10 | 7 | 5 | 12 |
| World food day | 1 | 0 | 0 | 0 | 40 | 25 | 65 | 0 | 0 | 0 |
| World soil day | 1 | 95 | 33 | 128 | 11 | 9 | 20 | 7 | 5 | 12 |
| Kisan Diwas | 1 | 151 | 122 | 273 | 35 | 18 | 53 | 5 | 3 | 8 |
| Mahila Kisan Diwas | 1 | 0 | 0 | 0 | 0 | 47 | 47 | 0 | 1 | 1 |
| **Special day celebrations** |  |  |  | 0 |  |  | 0 |  |  | 0 |
| National Science day | 1 | 26 | 18 | 44 | 0 | 0 | 0 | 3 | 1 | 4 |
| World water day | 1 | 170 | 33 | 203 | 22 | 0 | 22 | 5 | 3 | 8 |
| World milk day | 1 | 32 | 5 | 37 | 0 | 0 | 0 | 0 | 0 | 0 |
| World environment day | 1 | 90 | 20 | 110 | 0 | 0 | 0 | 5 | 3 | 8 |
| PM Kisan Samman Nidhi | 1 | 20 | 10 | 30 | 0 | 0 | 0 | 2 | 3 | 5 |
| Swachhata Pakhawada | 1 | 401 | 88 | 489 | 33 | 13 | 46 | 5 | 3 | 8 |
| Tree Plantation Campaign | 1 | 70 | 135 | 205 | 10 | 17 | 27 | 4 | 2 | 6 |
| Partenium awareness week | 1 | 88 | 28 | 116 | 10 | 3 | 13 | 2 | 2 | 4 |
| Climate resilient technologies for dryland | 1 | 66 | 0 | 66 | 38 | 11 | 49 | 0 | 0 | 0 |
| Special swatchata campaign | 2 | 87 | 28 | 115 | 87 | 0 | 87 | 4 | 1 | 5 |
| **Total** | **686** | **5850** | **1692** | **7542** | **890** | **292** | **1182** | **259** | **118** | **377** |

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

|  |  |  |
| --- | --- | --- |
| Sl. No. | **Type of media/activity** | **Number of activities/Number** |
| 1 | Popular articles | 2 |
| 2 | Newspaper coverage | 10 |
| 3 | Extension Literature | 15 |
| 4 | Radio Talks | 2 |
| 5 | TV Talks | 0 |
| 6 | CD/DVD/Video clips | 3 |
| 7 | Animal health camps (no. of animal treated) | 0 |
| 8 | Others, please specify | 0 |
|  | **Total** | **32** |

**PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS (2020)**

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Crop category | **Name of the crop** | **Variety** | **Hybrid** | **Quantity of seed**  **(qtl)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
| Cereals (crop wise) | Rabi Sorghum | SPV-2217 |  | 2.53 | 15180 | 58 |
| Oilseeds | Groundnut | TG-37A |  | 1.20 | 9000 | 3 |
|  |  | DGRMB-24 |  | 1.20 | 9000 | 3 |
|  |  | G2-52 |  | 1.20 | 9000 | 3 |
|  |  | Kadiri Lepaxshi  (K-1812) |  | 20.00 | 200000 | 50 |
|  | Safflower | ISF-764 |  | 37.11 | 360100 | 312 |
|  |  | A-1 |  | 0.24 | 2400 | 6 |
| Pulses | Bengalgram | JAKI-9218 |  | 10.00 | 100000 | 50 |
|  | Bengalgram | NBEG-49 |  | 1.0 | 8300 | 5 |
|  | Bengalgram | NBEG-49 |  | 1.0 | 8300 | 5 |
|  | Bengalgram | DBGV-204 |  | 1.00 | 8300 | 5 |
|  | Greengram | DGGV-2 |  | 2.65 | 37100 | 60 |
|  | Redgram | TS-3R |  | 2.70 | 32400 | 90 |
| Commercial crops |  |  |  |  |  |  |
| Vegetables | Onion | Bheema Super |  | 1.76 | 440000 | 63 |
|  |  | Arka Kalyan |  | 0.50 | 125000 | 10 |
| Flower crops |  |  |  |  |  |  |
| Spices |  |  |  |  |  |  |
| Fodder crop seeds |  |  |  |  |  |  |
|  | Sorghum Multi-cut | COFS-31 |  | 71.90 Kgs | 49870 | 25 |
|  | Fodder Cowpea |  |  | 5.00 Kgs | 600 | 10 |
|  | Stylo haemata |  |  | 8.00 Kgs | 3600 | 35 |
|  | Stylo scabra |  |  | 2.75 Kg | 1025 | 12 |
|  | Lucerne |  |  | 10.75 Kg | 8900 | 35 |
|  | Subabul |  |  | 2.30 Kg | 1080 | 16 |
|  | Hedge Lucerne |  |  | 1.00 Kg | 800 | 1 |
|  | Sesbenia Grandiflora |  |  | 3.00 Kg | 2360 | 17 |
| Fiber crops |  |  |  |  |  |  |
| Forest Species |  |  |  |  |  |  |
| Others (specify) |  |  |  |  |  |  |
| **Total** |  |  |  | **85.14 Qtls** | **1432315** | **874** |

**9.B. Production of hybrid seeds by the KVKs : NIL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 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 materials by the KVKs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Hybrid** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial |  |  |  |  |  |  |
| Vegetable seedlings | Drumstick | Bhagya |  | 175 | 3500 | 35 |
| Fruits | Mango | Alphonso/Kesar |  | 860 | 105000 | 20 |
|  | Tamarind | PKM-1 |  | 190 | 26000 | 10 |
|  | Jamun | AJG-85 |  | 175 | 21250 | 35 |
|  | Guava | Luncknow-49 |  | 300 | 36000 | 35 |
|  | Custard Apple | Golden |  | 450 | 37500 | 10 |
|  | Lime | Kagzi lime |  | 225 | 33750 | 35 |
|  | Papaya | Red lady |  | 175 | 8750 | 35 |
| Ornamental plants |  |  |  |  |  |  |
| Medicinal and Aromatic |  |  |  |  |  |  |
| Plantation | Cashewnut | Vengurla-4 |  | 270 | 35100 | 20 |
| Spices | Curryleaf | Suhashini |  | 175 | 5250 | 35 |
| Tuber |  |  |  |  |  |  |
| Fodder crop saplings | Guiniea grass |  |  | 20000 | 19375 | 32 |
|  | Congo signal |  |  | 19500 | 19500 | 20 |
|  | Hybrid napier grass | DHN-6 |  | 10775 | 20175 | 23 |
|  | Rhodes grass |  |  | 16500 | 16500 | 20 |
|  | Super Napier |  |  | 12600 | 25200 | 15 |
| Forest Species |  |  |  |  |  |  |
|  | Teak |  |  | 400 | 1800 | 10 |
|  | Sandalwood |  |  | 280 | 16800 | 10 |
| Others(specify) |  |  |  |  |  |  |
| **Total** |  |  |  | **83050** | **431450** | **400** |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Crop category | **Name of crop** | **Name of the**  **hybrid** | **Quantity of seed**  **(q)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
| Vegetable seedlings | Chilli | Syngenta 2094 | 3000 | 3000 | 1 |
|  |  |  |  |  |  |
| **Total** |  |  | **3000** | **3000** | **1** |

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

| **Bio Products** | **Name of the bio-product** | **Quantity**  **Kg** | **Value (Rs.)** | **Number of farmers to**  **whom provided** |
| --- | --- | --- | --- | --- |
| Bio Fertilizers | Vermiwash | 230 lit | 9200 | 28 |
|  | Vermicompost | 145 Qtl | 58000 | 46 |
|  | Rhizobium | 35.0 Kgs | 3850 | 40 |
|  | PSB | 50.0 Kgs | 5500 | 40 |
|  | Azospirillum | 12.0 Kgs | 1320 | 24 |
| Bio-pesticide |  |  |  |  |
| Bio-fungicide | Trichoderma | 63.0 Kgs | 12600 | 126 |
| Bio Agents | Earthworms | 180.25 Kgs | 54075 | 95 |
| Others (specify) | Azolla | 8.25 Kgs | 825 | 10 |
| **Total** |  | **15078.5 Kgs** | **145370** | **409** |

# 9.F. Production of livestock : NIL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particulars of Live stock | **Name of the breed** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| **Dairy animals** |  |  |  |  |
| Cows |  |  |  |  |
| Buffaloes |  |  |  |  |
| Calves |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Poultry** |  |  |  |  |
| Broilers |  |  |  |  |
| Layers |  |  |  |  |
| Duals (broiler and layer) |  |  |  |  |
| Japanese Quail |  |  |  |  |
| Turkey |  |  |  |  |
| Emu |  |  |  |  |
| Ducks |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Piggery** |  |  |  |  |
| Piglet |  |  |  |  |
| Others (Pl.specify) |  |  |  |  |
| **Fisheries** |  |  |  |  |
| Fingerlings |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Total** |  |  |  |  |

**PART X – PUBLICATION, SUCCESS STORY, INNOVATIVE MTHODOLOGY, ITK, TECHNOLOGY WEEK**

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

1. KVK Newsletter:

Date of start: English News Letters – January, 2003 &

Krishi Darpana in Kannada language – October 2015

Periodicity:\_Monthly\_\_\_\_\_\_\_Copies printed in each issue:\_\_\_250\_\_\_\_\_\_\_\_\_

(B) Literature developed/published

|  |  |
| --- | --- |
| **Item** | **Number** |
| Research papers- International | 0 |
| Research papers- National | 0 |
| Technical reports |  |
| Technical bulletins | 4 |
| Popular articles - English |  |
| Popular articles – Local language | 2 |
| Extension literature | 1 |
| Others (Pl. specify) |  |
| **TOTAL** | **7** |

(iii) Details of Literature developed/published

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

**1.   Research articles in journals:** NIL

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

KVK Scientists, (January-March, 2021) Krishi Vigyan Patrike, Volume-11, Issue-1, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 9p.

KVK Scientists, (April-June, 2021) Krishi Vigyan Patrike, Volume-11, Issue-2, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 8p.

KVK Scientists, (July-September, 2021) Krishi Vigyan Patrike, Volume-11, Issue-3, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 8p.

KVK Scientists, (October-December, 2021) Krishi Vigyan Patrike, Volume-11, Issue-4, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 10p.

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

Dr. Sudha V. M. (2021), A view of ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, Dist.: Gadag, *Krishi Kamadenu,*14(1):11-17

Dr. Sudha V. M. (28-07-2021), How to protect children from Covid III wave, Navoday*,2*

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.

Dr. Sudha V. M. (2021), Solar drier, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 4p

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Type of media** | **Title** | **Details** |
| 1 | CD / DVD | Nutri Garden | 1. Nutri Garden and its importance |
| 2 | Mobile Apps | - | - |
| 3 | Social media groups with KVK as Admin | WhatsApp –   * KVK, HULKOTI, GADAG group * Cashew Growers group * Mango Growers group * GADAG FPO’s * Nutri * Dairy entrepreneurs : KVK | 2856 members |
| 4 | Facebook account name | Khp Kvk Hulkoti | 499 followers |
| 5 | Instagram account name | KVKGadag | 75 followers |
| 6 | Twitter Account | ICAR-KVK Gadag | 38 followers |
| 7 | Youtube Account | K.H.Patil Krishi Vigyan Kendra Hulkoti | 4420 subscribers |

**10.C. Success Stories / Case studies**

1. **DARING INTO DAIRY PROFESSION - A youth’s success story**

Shri K. Nitin, aged 28 years is a graduate in Computer Application. A resident of Gadag city, his family runs a bakery shop. Immediately after graduation during 2018, he worked for a local Co-operative Bank as a Cashier with a salary of Rs.13,000/- per month. He was not satisfied with the job and left it. He started a small dairy unit with 3 HF Cows in one of his relative’s land on lease basis and was succesful in gaining the confidence for management of dairy unit. However, he wanted to fine tune his skills in dairy farming. During 2020, he attended training on “Scientific Dairy Farming” at KVK under sponsored programme of “Agriculture Skill Council of India”.

Participation in training programme was an eye openner for him as he learnt lot of skills related to management of cattle shed, nutrition, health, value addition and marketing. Immediately after the training programme, he prepared a project report for 5 cows and made expansion of his dairy unit with a technical guidance of KVK. He transformed himself into a successful dairy enterpreneur. In the begining of 2021-22, he had 9 milking cows, each cow producing 25-30 liters of milk per day. An average milk production was 120 to 125 liters per day. He sells milk at Dodla milk collection centre and price is based on the fat percentage. He gets average price of Rs.29/- per litre. Thus, Mr. Nitin earns Rs.3480/- per day. He says that, he incures expenditure of 50 percent of gross income. His net income from 9 cows was Rs.1740/- per day. Apart from this, he sells FYM worth of 1.5 lakhs per year. Balanced nutrition, clean milk production and timely insemination are very important to be a successful dairy farmers. He has given employment to 2 people who looks after every aspects of milk production. Nitin says that, monthly he gets net income of Rs.64,700/- from sale of cow milk and dung. He gives the credit to ASCI sponsored training and continuous hand holding of KVK Scientists.



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**Certificate received from NSDC**

**Mr.Nitin with ASCI batchmates**

**Visit to Dairy Unit at UAS, Dharwad with other ASCI trainees**

**Feeding preparation**

**Milking of cow**

1. **LIVELIHOOD SUPPORT THROUGH BOREWELL RECHARGING -**

**A success story of a small farmer**

Mahalingapur is a small hamlet located in Kappatagudda hill terrain of Gadag district. The village is exclusively inhabited by the “Lambanis” the traditional tribal people. The villge was adopted by KVK under National Innovation on Climate Resilient Agriculture (NICRA) Project during 2015-16. Mr.Shekappa Takrappa Lamani is one of the participant farmer for Natural Resource Management intervention of KVK. Mr.Lamani is a small farmer having 3 acres of dryland and cultivating Greengram and Maize under dryland. The income from the land was not sufficient and he used to migrate to Goa to earn his livelihood for his family of 6 members. During 2015-16, he dug a borewell in his field. But, the borewell did not yield water even after digging a depth of 360 feet. He consulted KVK Scientists for this problem. KVK Scientists visited his field and observed that lot of rain water was wasted from the catchment area on upper side of the borewell. During 2017-18 under NICRA project, KVK constructed recharging pit around the borewell and the rain water from 4 acres of catchment was diverted to borewell recharing pit. During 2018-19, the borewell got recharged and farmer started irrigation of his 3 acre land. He started cultivating commercial crops like Maize in Kharif season and Groundnut in Rabi-Summer season. He adopted sprinkler irrigation system for efficient use of water. The details of the crops grown and the net income realised is given below :

| **Year** | **Crops** | **Area (Acre)** | **Net income realised (Rs.)** |
| --- | --- | --- | --- |
| Before intervention **2016-17** | Greengram | 3 | 27000 |
| Rabi Sorghum | 3 | 18000 |
| **TOTAL** | | | **45000** |
| After intervention **2017-18** | Maize | 3 | 48000 |
| Groundnut | 3 | 60000 |
| **TOTAL** | | | **108000** |
| **2018-19** | Maize+Redgram | 3 | 55000 |
|  | Groundnut | 3 | 55000 |
| **TOTAL** | | | **110000** |
| **2019-20** | Groundnut | 3 | 65000 |
| Maize | 2 | 35000 |
| Greengram | 1 | 90000 |
| **TOTAL** | | | **109000** |
| **2020-21** | Maize+Redgram | 1 | 35000 |
| Greengram | 2 | 30000 |
| Groundnut | 3 | 60000 |
| **TOTAL** | | | **125000** |

There has been significant increase in the net income of farmer eversince borewell is recharged. Farmer’s income has been doubled and even more compared to his benchmart income before intervention. 8 farmers have adopted the technology in Mahalingapur and surrounding villages. Now, Mr. Lamani never think of migration and he is fully engaged in his farm along with this family members.

1. **BLOOMING THE FLOWERS FOR BETTER INCOME**

Shri Hanumantappa Roddanavar of Singataryanakeri village in Mundaragi taluk is one of a participant farmer under DFI programme of KVK. He never thought that he would get net income of Rs.2.62 lakhs in a year from the cultivation of Tuberose and Chrysanthemum through better management practices. Earlier, he used to get only Rs.1.00 lakh income from the same piece of land by cultivation of same crops.

He faced productivity constraints of loose flower buds, improper opening of flowers and faded flowers, incidence of bud borer, leaf spot disease in Chrysanthemum and incidence of thrips, leaf blight and nutrient related constraints in Tuberose. During, 2020-21, KVK made interventions of nutrient management (foliar application of micronutrients), application of neem cake and timely management of bud borer and leaf spot disease through FLD programme in 0.5 acres. In another 0.5 acres of Tuberose, KVK guided the farmer for adoption of Integrated Crop Management practices with micronutrient application, spray of *Lecanicillium lecanii* for thrips management and clean cultivation practices for blight management. KVK interventions and extension support led him to harvest 1.5 tonns of quality Chrysanthemum flowers and 3.5 tonns of Tuberose from 0.5 acre each.

He got average price of Rs.65 for Chrysanthemum and Rs.90/- for Tuberose per Kg by selling in Gadag and Hubballi markets. Thus, this farmer got Gross Income of Rs.4.12 lakhs. He incurred expenditure of Rs.1.50 lakhs for both crops. Net Income realized was Rs.2.62 lakhs compared to Rs.1.0 lakh in earlier years.

Planting of the crops to coincide flowering with festivals of Shravana, Ganesh Chaturthi, Vijayadasami and Diwali along with technical support from KVK are the major success indicators for the realization of higher productivity of quality flowers and better income.

Like Mr.Roddanavar, there are 12 flower growers in this DFI village who have realized better income though adoption of better management practices under the guidance of KVK.



**Bountiful crop of Tuber rose through KVK interventions**

**Quality flower production of Chrysanthemum through adoption of ICM practices**

**10.D. Give details of innovative methodology or innovative approach of technology developed and used during the year**

**TRANSFER OF TECHNOLOGY THROUGH VIRUTAL MODE**

KVK has been involved in promotion of Mango as a strategy for income security to farmers in red soil based cropping system. Lot of productivity constraints have been faced by the mango growers related to pruning, nutrition, plant protection and post harvest management. KVK having limited man power was unable to address these issues of mango growers who are scattered in the district. It was also difficult to reach each mango grower during the COVID pandemic period. In order to address issues, KVK organized Virtual Farmers’ Field School on mango comprising of 5 different sessions on orchard management, pruning, nutrition, plant protection and post harvest management. KVK formed WhatsApp group of mango growers and each virtual school session link was sent to the group and KVK expertsinteracted with the mango growers. The contents for each sessionwas pre-recorded and virtually video screened through virtual mode followed by discussion. After the completion of each session, the contents of session was uploaded in the youtube.This mechanism was found to be very effective in achieving the desired objective.

**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)** |
| Nipping in Bengalgram | 150 | 50 | Rs.20,000/ha | Rs.26,000/ha |
| Feeding of Silage Fodder to CB Cows | 50 | 50 | Rs.30,000/  lactation/cow | Rs.40,000/  lactation/cow |
| Mango special (micronutrient mixture) application | 75 | 60 | Rs.80,000/ha | Rs.1,00,000/ha |
| Introduction of Arka Prasanna improved variety in Ridegourd crop | 25 | 50 | Rs.80,000/-ha | Rs.1,10,000/-ha |
| Azolla as animal feed | 75 | 50 | Rs.35,000/cow /lactation | Rs.40,000/cow / lactation |
| INM in Groundnut | 100 | 40 | Rs.25,000/ha | Rs.35,000/ha |
| Use of ISF-764 variety of Safflower along with ICM Practices | 154 | 80 | Rs.25,000/- ha | Rs.35,000/- ha |
| Capsule borer management in Safflower crop | 45 | 60 | Rs.15,000/- ha | Rs.25,000/- ha |
| Use of Arka Vegetable special for micronutrient management in vegetables | 30 | 50 | Rs.64,000/- ha | Rs.75,000/- ha |

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

| **S. No.** | **Crop / Enterprise** | **ITK Practiced** | **Purpose of ITK** | **Scientific Rationale** |
| --- | --- | --- | --- | --- |
| 1 | Crops | To reduce the infestation of weed i.e Cyprus rotundus, the farmers practice weekly harrowing throughout the end of rainy season i.e from April to October. Then they will take up Rabi Sorghum crop. | Every week harrowing with blade goes on cutting the fresh sprouting meristems of the weed Cyprus rotundus. This weekly cutting results in exhausting of the nutrients present in the bulbs of weeds and no chance for photosynthesis by leaves. Hence, the roots get deprived of the fresh photosynthates on one hand and on other the stored energy gets lost due to growth of fresh meristems every week, but they get cut off with harrowing blade. Thus, the weed has no chance of re-growth when weekly harrowing is done regularly from April to October. | The weekly cutting results in exhausting of the nutrients present in the bulbs of weeds and no chance for photosynthesis by leaves. Hence, the roots get deprived of the fresh photosynthates on one hand and on other the stored energy gets lost due to growth of fresh meristems every week, but they get cut off with harrowing blade. Thus, the weed has no chance of re-growth when weekly harrowing is done regularly from April to October |
| 2 | Livestock | Animal washing in Canal/river water | For the treatment of foot & mouth disease | It facilitates drying of wound and protection from flies |
| 3 | Livestock | Turmeric powder mixed in ghee, heated and applied | For the healing of wound | Turmeric has got anti microbial properties. |
| 4 | Livestock | Washing of hoves of animals with lime water | For the treatment of foot and mouth disease | Lime has antiseptic property. It kills germs and healing is fast. |
| 5 | Livestock | Zeera & Garlic are boiled in water and is fed | For the treatment of fever | Act as anti cold & fever. |
| 6 | Livestock | * Tobacco shoot with Kerosine oil paste is made and applied * Leaves of neem or neem oil | For the treatment of ecto parasite infestation | Tobacco contain nicotine that kills ecto parasite. Neem has got ecto parasiticadal properties. |

**10 F. Technology Week celebration:**

Period of observing Technology Week: **From 16-12-2021 to 22-12-2020**

Total number of farmers visited : **597**

Total number of agencies involved : **2**

Number of demonstrations visited by the farmers within KVK campus : **6**

Other Details

| **Types of Activities** | **No. of**  **Activities** | **Number of**  **Farmers** | **Related crop/livestock technology** |
| --- | --- | --- | --- |
| Gosthies |  |  |  |
| Lectures organized | 3 | 220 | Lectures organized on crop & dairy technologies |
| Exhibition | 1 | 200 |  |
| Film show | 1 | 38 | Mango & Cashew |
| Fair |  |  |  |
| Farm Visit | 3 | 52 | Rabi crops, Livestock, Agricultural Machineries |
| Diagnostic Practicals | 3 | 87 | Method demonstration on use of Phermone traps, spray of Pulse Magic & solar operated sprayer |
| Supply of Literature (No.) | 8 | 200 | Crop technology |
| 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** |  | **597** |  |

**10 E. Recognition and Awards: Nil**

**PART XI – SOIL AND WATER TEST**

**11.1 Activities of Soil and Water Testing Laboratory**

A. Status of establishment of Lab : 2005-06

1. Year of establishment : 01.07.2005

2. List of equipments purchased with amount :

| Sl. No | Name of the Equipment | Qty. | Cost |
| --- | --- | --- | --- |
|  | 1. Non-recurring contingency |  |  |
| 1 | Spectrophotmeter | 1 | 0.60 |
| 2 | Flame photometer | 1 | 0.50 |
| 3 | pH meter | 1 | 0.10 |
| 4 | Conductivity bridge | 1 | 0.10 |
| 5 | Physical balance | 1 | 0.10 |
| 6 | Chemical balance | 1 | 1.00 |
| 7 | Water distillation still | 1 | 1.00 |
| 8 | Orbital shaker | 2 | 0.60 |
| 9 | Shaker | 2 | 0.50 |
| 10 | Refrigerator | 1 | 0.20 |
| 11 | Oven with optional attachments | 1 | 0.15 |
| 12 | Hot plate with all models | 1 | 0.25 |
| 13 | Grinder with motor | 1 | 0.30 |
| 14 | Laboratory set up (all basic facilities) |  | 3.20 |
| 15 | PUSHA STFR meter Kit | 1 | 0.75 |
| 16 | MRIDAPARIKSHA | 1 | 0.903 |
|  | Total (A) |  | 10.253 |
|  | 1. Recurring contingency |  |  |
| 1 | Chemical & glasswares |  | 3.50 |
| 2 | Miscellaneous items |  | 0.20 |
| 3 | Soil and plant sample processing and storage facility |  | 0.50 |
|  | Total (B) |  | 4.20 |
| Grand Total (A+B)) | |  | 14.453 |

B. Details of samples analyzed so far since establishment of SWTL:

|  |  |  |  |
| --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages |
| Soil Samples | 10490 | 22671 | 359 |
| Water Samples | 5399 | 5175 | “ |
| Plant samples | 116 | 116 | “ |
| Manure samples | - | - | - |
| Others (specify) | - | - | - |
| Total | 16005 | 27962 | 359 |

C. Details of samples analyzed during the 2021 :

|  |  |  |  |
| --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages |
| Soil Samples | 528 | 1574 | 56 |
| Water Samples | 438 | 438 |  |
| Plant samples |  |  |  |
| Manure samples |  |  |  |
| Others (specify) |  |  |  |
| Total | 966 | 2012 | 56 |

11.2 Mobile Soil Testing Kit :

A. Date of purchase and current status

|  |  |  |
| --- | --- | --- |
| Mobile Kits | Date of purchase | Current status |
| 1. PUSA SFTR meter kit | 22-02-2016 | Working |
| 1. MRIDA PARIKSHAK | 31-03-2017 | Working |
|  |  |  |

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | During 2020 | During 2021 | Cumulative progress (Total) |
| Samples analyzed (No.) | 560 | 325 | 1580 |
| Farmers benefited (No.) | 1657 | 909 | 4645 |
| Villages covered (No.) | 5 | 4 | 23 |

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit during 2021:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | Date (s) | Villages (No.) | Farmers (No.) | Samples analyzed (No.) | Soil health cards issued (No.) |
| SWTL | 1st Jan, 2021 to  31st Dec, 2021 | 127 | 519 | 528 | 1574 |
| Mobile Soil Testing Kit | 1st Jan, 2021 to  31st Dec, 2021 | 4 | 543 | 560 | 909 |

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 | 133 | 146 | 7 | 1. Mrs. Kamalaxi P. Halli   Vice President,  Gram Panchayat, Hulkoti  2) Mrs. Shridevi Kori  Ex-president,  Gram Panchayat, Hulkoti | 11 | 3 |

**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)** |
| Nipping in Bengalgram | 150 | 50 | Rs.20,000/ha | Rs.26,000/ha |
| Feeding of Silage Fodder to CB Cows | 50 | 50 | Rs.30,000/  lactation/cow | Rs.40,000/  lactation/cow |
| Mango special (micronutrient mixture) application | 75 | 60 | Rs.80,000/ha | Rs.1,00,000/ha |
| Introduction of Arka Prasanna improved variety in Ridegourd crop | 25 | 50 | Rs.80,000/-ha | Rs.1,10,000/-ha |
| Azolla as animal feed | 75 | 50 | Rs.35,000/cow /lactation | Rs.40,000/cow / lactation |
| INM in Groundnut | 100 | 40 | Rs.25,000/ha | Rs.35,000/ha |
| Use of ISF-764 variety of Safflower along with ICM Practices | 154 | 80 | Rs.25,000/- ha | Rs.35,000/- ha |
| Capsule borer management in Safflower crop | 45 | 60 | Rs.15,000/- ha | Rs.25,000/- ha |
| Use of Arka Vegetable special for micronutrient management in vegetables | 30 | 50 | Rs.64,000/- ha | Rs.75,000/- ha |

**12.B. Cases of large scale adoption**

**(Please furnish detailed information for each case with suitable photographs)**

1. **Adoption of management practices for Tea-Mosquito in Cashew crop**:

KVK has been promoting Cashew in Gadag district since 6-7 years. About 400 hectares of area has been brought under Cashew cultivation. Cashew Growers have been facing incidence of Tea-Mosquito bug that has affected the productivity of nuts. The bug damages new shoots,leaves, flowers and nuts affecting the yield and quantity of nuts. KVK has been advising Cashew Growers on management of Tea-Mosquito bug through training programmes, farm advisory services, WhatsApp groups and literatures. KVK recommended spray of lambda cylothrin @ 1ml per litre along with hexaconazole @ 1ml per litre. The recommendation has been widely adopted by the Cashew Growers in the district.

1. **Large scale adoption of JAKI-9218 variety of Bengalgram crop**:

Bengalgram is the important Pulse crop of Gadag district, mainly cultivated under rainfed situation. It is being grown in an area of 80,000 ha. The productivity of the crop was very less due to decreasing yield potential of Annigeri-1 and JG-11 varieties cultivated by the farmers. From 2014-15 onwards, KVK started promoting JAKI-9218, a high yielding variety. Integrated Crop Management practices were also demonstrated along with JAKI-9218 variety. From 2014-15 to 2020-21, KVK organised Front Line Demonstrations in 300 hectares of area covering 690 farmers and farm women. The demonstrations were organised under KVK’s FLD programme as well as Cluster Front Line Demonstration under NFSM programme. The demonstrations have been very successful as there was 20-25 percent increase in yield.



Five years of demonstration programme has produced more than 2500 quintals of seed material which FLD farmers supplied to other farmers. Apart from this, KVK produced 75 quintals of JAKI-9218 variety and supplied to farmers.

There was heavy demand for the seed and KSSC took up seed production and supplied more than 6000 quintals of seeds during last four year period. Thus, JAKI-9218 variety is spread in nearly 70 percent of total area cultivated in Gadag district.

1. **Large scale adoption of Maize+Redgram intercropping system:**

Maize is cultivated as a sole crop in Gadag district over an area of 25,000 hectares under rainfed situation. The crop has fetched good returns to farmers owing to good yield and less cost of cultivation. However, during the last decade the climate variability has severely affected the productivity. The crop is sown during the months of June-July. The last decade has witnessed severe climatic changes viz., delayed on-set of mansoon and long dry spells. This situation has affected the vegetative stage as well as tassel initiation stage resulting in poor productivity of crop. At present the district average productivity of Maize is 24 quintals per hectare.

To minimize the risk of sole cultivation of Maize, KVK introduced TS-3R variety of Redgram, a medium duration variety (140-150 days) as an intercrop in Maize. KVK demonstrated Maize+Redgram intercropping system in 55 hectares area in 7 villages during last 5 years. Apart from introduction of TS-3R variety, KVK demonstrated Integrated Crop Management practices. KVK conducted training programme for farmers and Extension Functionaries on Maize+Redgram intercropping system and ICM technologies. Maize+Redgram based intercropping system has created big impact in terms of increased net income of farmers compared to farmers who have cultivated Maize as a sole crop. These demonstrations have created a huge impact in the demonstrated villages of Mahalingapur and Nabhapur in Gadag block and Kochalapur village in Ron block. The intercrop technologies have been spread in more than 500 hectares in KVK adopted villages as well as neighbouring villages during 2018-19, 2019-20 & 2020-21.

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

1. **IMPACT ANALYSIS OF INTERVENTIONS IN FLOWER CROPS :**

Shingatarayanakeri in Kappatagudda hill terrain is one of the village in Mundaragi taluk of Gadag district adopted by KVK, Gadag during 2017-18. The village has a sloppy terrain. Most of the cultivable land is having pebble type of soil. Majority of the farmers belongs to small and marginal land holding category. Farmers cultivate Maize, Bt.Cotton, Spreading and Bunch Groundnut, Greengram under rainfed situation. Eighty percent of farmers are having irrigation facilities through borewell. Flowers like Chrysanthemum, Tuberose, Gallardia and Marigold are being cultivated throughout the season under available irrigation. Flowers are the major bread earners for the farmers as there is good demand for flowers in festive season. They usually sell the flowers in nearby Gadag and Hubli market and some time distant market of Solapur and Pune.

When KVK entered the village during 2017-18, lot of productivity constraints were noticed in flower cultivation. Incidence of pest and disease and improper plant nutrition were the major issues affecting the productivity of flowers and profitability of cultivation. Improper opening of flowers, incidence of thrips and bud borer, alternate leaf spot were the problems in Chrysanthemum and Gallardia. In Tuberose, bulb rot and mealy bug were the major problems affecting the productivity. Based on the problem analysis, KVK made interventions in flower crops for flower growers during 2019-20 to 2021-22 through organizing Front Line Demonstrations on balanced nutrition, appropriate plant protection measures, capacity building training programmes and farm advisory services.

**INTERVENTIONS**

KVK made comprehensive interventions of flower growers in the form of organization of Front Line Demonstrations, capacity building training programmes on production technology of flower crops and farm advisory services by visiting the fields. FLDs on ICM practices in Chrysanthemum, Tuberose, Gallardia and Marigold were organized in 19.80 hectares during 2019-20 to 2020-21. During the same period, 22 training courses have been conducted for 321 farmers on flower crops and 202 farm advisory services were demonstrated. Details are presented in Table:-1

**Table-1: Interventions of KVK (2019-20 to 2020-21)**

| **Sl. No** | **Name of the intervention** | **No / Area (Ha.)** |
| --- | --- | --- |
| 1 | Front Line Demonstration in Chrysanthemum, Tuberose, Gallardia and Marigold | 19.80 |
| 2 | Capacity building training programmes | 22 nos.  (321 farmers) |
| 3 | Farm advisory services | 202 nos. |

**OUTPUT OF KVK FLD INTERVENTIONS (2019-20 TO 2020-21)**

Sixty seven flower growers were involved in the FLD programme on flower crops in an area of 19.10 hectares. Major demonstration components were nutrition management, timely and appropriate plant protection measures and post harvest technologies. FLD data presented in Table :-2 reveals that there has been increased productivity of flowers in demonstration fields compared to local check. Per centage increase in flower yield in Chrysanthemum is 20.54 per cent followed by 18.90 percent in Marigold, 15.90 per cent in Tuberose and 18.89 per cent in Gaillaridia.

**Table-2: Output of KVK interventions (2019-20 to 2020-21)**

| **Sl. No** | **Crop** | **Technological intervention** | **Area**  **(ha.)** | **No. of farmers** | **Flower productivity**  **(Qtl/.ha.)** | | **% increase** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Local** | **Demo** |
| 1 | Chrysanthemum | Integrated Crop Management | 6.00 | 30 | 48.15 | 58.05 | 20.54 |
| 2 | Marigold | Integrated Crop Management | 4.50 | 11 | 146.63 | 174.38 | 18.90 |
| 3 | Tuberose | Integrated Crop Management | 2.60 | 11 | 53.38 | 61.88 | 15.91 |
| 4 | Gallardia | Integrated Crop Management | 6.00 | 15 | 59.98 | 71.23 | 18.83 |
| **TOTAL** | | | **19.10** | **67** | **-** | **-** | **-** |

**ECONOMICS OF DEMONSTRATION**

It is observed from the data depicted in Table:-3 that flower growers participated in the demonstration have immensely benefitted in terms of good Net Returns and healthy Benefit Cost Ratio. Chrysanthemum growers have got Net Return of Rs.2,33,121/- as against Rs.1,79,799/- per hectare in local check B.C. Ratio is 2.62 compared to 1.92 in check plot. Marigold growers got Net Return of Rs.75,008/- in demonstration plot compared to Rs.57,090/- per hectare in check plot. Tuberose and Gallardia cultivators got Net Return of Rs.1,62,998/- and Rs.1,61,236/- per hectare respectively as against Rs.1,26,770/- and Rs.1,23,923/- in local check plot. Thus, the flower growers have been immensely benefitted by adoption of appropriate technologies in demonstration plots.

**Table-3: Economics of demonstration**

| **Sl. No** | **Crop** | **Demonstration**  **(Rs./.ha.)** | | | | **Local**  **(Rs./.ha.)** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gross Cost** | **Gross Return** | **Net Return** | **BC Ratio** | **Gross Cost** | **Gross Return** | **Net Return** | **BC Ratio** |
| 1 | Chrysanthemum | 144233 | 377355 | 233121 | 2.62 | 133149 | 312948 | 179799 | 1.92 |
| 2 | Marigold | 63375 | 138383 | 75008 | 2.21 | 54345 | 111435 | 57090 | 2.06 |
| 3 | Tuberose | 109090 | 272088 | 162998 | 2.50 | 97680 | 224450 | 126770 | 2.30 |
| 4 | Gallardia | 124753 | 285988 | 161236 | 2.30 | 115964 | 239887 | 123923 | 2.07 |

**CONCLUSION**

Flower growers who participated in FLD, training programmes, and extension programmes of KVK have been convinced about the utility of flower production technologies. This is evident from the results of Front Line Demonstrations carried out during 2019-20 to 2021-22. Increased productivity of flowers was found in all the 4 flower crops with healthy B.C.Ratio.

**2) IMPACT ANALYSIS ON NUTRI-GARDEN :**

**Introduction :**

Good food and nutrition play an important role in building healthy nation. Farmers who feed the nation have to take care of themselves and their family with good and quality nutrition to have sound health. To get sound health, one must eat foods rich in nutrients and give protection to body against deficiency diseases. Due to urbanization, modernization, fascination towards the fast foods, bakery foods, packaged and unhealthy food, the nutritional problems are more predominant among children, youths and women. In view of this, the consumption of fresh fruits, vegetables, roots and tubers and leafy vegetables is reduced drastically. To combat this situation, the Nutrition Garden plays an important role in providing good nutrition to farm families. Though it is important, many farm families are not cultivating vegetables and fruits in the backyard or in the farm for home consumption. They used to buy the vegetables and fruits from the market. Fluctuation in price and the non availability of fruits and vegetables leads to deficiency disease like Anemia, Malnutrition, stunting, under nutrition etc. To overcome this, from 2019-20 to 2021-22, the demonstration on nutrition garden based on the family requirement was implemented by KVK in its adopted villages.

**Objectives** :

* To promote nutrition garden in farm families
* To reduce cost incurred on purchase of vegetables
* To know the nutritional status of farm women before and after the implementation of nutrition garden through change in consumption pattern
* To know the nutritional adequacy before and after establishment of nutri-garden

**Interventions** :

1. ***Demonstrations*** : A total of 95 demonstrations from 2019-20 to 2021-22 were conducted in DFI villages namely Shirol (Gadag), Chikkasavanur (Shirahatti), and Singatarayanakeri (Mundaragi) villages for Kharif and Rabi seasons. KVK provided local vegetable seeds and seedlings like brinjal, tomato, chilli, radish, sweet potato, beetroot, carrot, etc, leafy vegetables like palak, amaranthus, methi, dil, coriander etc., fruits and medicinal plants like guava, papaya, lime, drumstick, tulasi and curry leaf etc.
2. ***Training*** : A total of 26 trainings cum awareness programmes were conducted to farm women on health, hygiene, nutrition balanced diet and nutrition garden. In collaboration with Department of Women and Child Welfare, Gadag, a series of programmes were organised to school children, extension functionaries, teenage girls, women, etc. Since 3 years during September month, under “Nutrition Week and Nutrition Month”, KVK has organized lot of awareness programmes, radio programmes, articles published related to nutrition, group discussions, field visits, providing seed kits and planting materials to SHG women and extension functionaries of Department of Women and Child Welfare.
3. ***Field Days***: Three field days were organized to create awareness on health, nutrition, balanced diet and nutrition garden in the KVK adopted villages.
4. ***Field visits***: Sixty five field visits were organized to nutri-garden and gave advisory services on bio-pesticides, natural farming, trap crops etc.
5. ***Exposure visits***: 9 exposure visits to nutri-garden established at KVK and farmers field was organized to create awareness on importance of nutrition garden.

**Output** :

**(i) Demonstration on Nutri-Garden:**

Due to the interventions made on nutri-garden, women were able to produce vegetables, leafy vegetables and roots and tubers at the backyard as well as in the fields. The details of the year wise breakup of the demonstrations conducted for the last 3 years is presented in Table :- 1

**Table-1: Details on demonstrations on Nutrition Garden**

|  |  |  |
| --- | --- | --- |
| **Year** | **No. of demos.** | **Season** |
| 2019-20 | 45 | Kharif |
| 2020-21 | 25 | Kharif & Rabi |
| 2021-22 | 25 | Kharif & Rabi |

**(ii) Production of vegetables, leafy vegetables and roots:**

During 2019-20, the average production of vegetables, leafy vegetables and roots & tubers was higher because of the timely rainfall and favorable climatic conditions. The Chia seeds were supplied during 2020-21 and the yield was about 8 kgs (Graph:-1)

**Graph-1 :Average production of vegetables, leafy vegetables and roots & tubers for Kharif & Rabi seasons**

****

**Outcome** :

**(i) Economics of Nutri-Garden:**

The demonstration on nutri-garden has yielded production of lot of vegetables, leafy vegetables and roots & tubers. The details of the year-wise gross cost and B.C Ratio is presented below in table :- 2

** Table-2: Yearwise Gross Cost and BC Ratio**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Gross Cost (Rs.)** | **Gross Return (Rs.)** | **Net Return (Rs.)** | **B.C. Ratio** |
| 2019-20 | 68200 | 115320 | 47120 | 1.69 |
| 2020-21 | 85000 | 85976 | 43476 | 2.02 |
| 2021-22 | 85000 | 125508 | 78795 | 2.95 |
| **TOTAL** | **238200** | **326804** | **169391** | **-** |

Based on the production of vegetables, the net return and the B.C. Ratio was calculated. On an average, the gross return was Rs.3.26 lakhs and net return was Rs.1.69 lakhs for 25 families.

**(ii) Adequacy of vegetables :**

The % of adequacy of vegetables, roots and tubers and green leafy vegetables was calculated based on the availability of the vegetables and the Recommended Daily Allowance (RDA). The details of the % adequancy is presented in the table :- 3

**Table-3 : Percentage adequacy of vegetables : 2021-22**

|  |  |
| --- | --- |
| **Parameters** | **Quantity produced / availability** |
| Quantity of vegetables produced / month / family | 27.25 Kg |
| Average availability of vegetables / day / person | 227 gms |
| Percentage adequacy of vegetables | 45.40 % |

It was found from the above table that, the % adequacy of vegetables, roots and tubers was 45.40. Thus, the establishment of nutrition garden helped the farm women to get fresh vegetables daily and the consumption of leafy vegetables has increased from twice a week to four to five times a week.

** (iii) Consumption of nutrients:**

The details of consumption of nutrients from the farm women was collected through 24 hours recall method before and after the intervention of Nutri Garden. Based on the survey the consumption of cereals, pulses, vegetables, etc were calculated and are furnished in table:-4

**Table-4: Details of consumption of nutrients before and after intervention of nutrition garden**

| **Nutrients** | **RDA#** | **Before Intervention** | | **After Intervention** | |
| --- | --- | --- | --- | --- | --- |
| **Mean** | **Percentage adequacy** | **Mean** | **Percentage adequacy** |
| Cereals | 330 gms | 314.00 | 95.15 | 324.00 | 98.18 |
| Pulses | 75 gms | 73.80 | 98.40 | 74.40 | 99.20 |
| Milk and milk products | 300 ml | 120.40 | 40.13 | 142.00 | 47.33 |
| Roots and tubers | 200 gms | 42.60 | 21.30 | 112.00 | 56.00 |
| GLV | 100 gms | 31.80 | 31.80 | 82.00 | 82.00 |
| Other vegetables | 200 gms | 167.20 | 83.60 | 172.00 | 86.00 |
| Fruits | 100 gms | 37.80 | 37.80 | 83.20 | 83.20 |
| Sugar | 30 gms | 43.00 | 143.33 | 43.80 | 146.00 |
| Fat | 25 gms | 30.80 | 123.20 | 29.00 | 116.00 |

It was observed from the above table that, the consumption of roots and tubers, green leafy vegetables, other vegetables and fruits was more after the intervention of nutri-garden. Further, the consumption of sugars and fats was on higher side both before and after interventions of KVK. This is because of the increased consumption of sweets and drinking of tea with more sugar in rural area.

**(iv) Expenditure incurred towards purchase of vegetables :**

As a result of intervention of nutri-garden, the consumption of leafy vegetables and other vegetables has increased from twice a week to four to five times a week. The expenditure incurred towards purchase of vegetable is presented in table:- 5

**Table-5: Expenditure incurred towards purchase of vegetables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Particulars** | **Family with nutri-garden (Rs.)** | **Family without nutri-garden(Rs.)** |
| 1 | Amount spent towards purchase of vegetables | 3600 | 19200 |
| 2 | Amount spent by 25 families towards purchase of vegetables per year | 90000 | 480000 |
| 3 | Amount saved by 25 families per year | 390000 | - |



The expenditure incurred towards purchase of vegetables per year has reduced from Rs.19,200/- to Rs.3600/-. Because of the intervention made on nutria garden. Further It is observed from the table that, Rs.3.9 lakhs had been saved by 25 families as a result of establishment of nutri-garden

**(v) Vegetables sold by families having nutri-garden :**

The excess vegetables after consumption were supplied to neighbors and friends and some of the vegetables were sold in the market.

**Table-6: Details of quantity of vegetables consumed and sold by families having nutri-garden** :

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Particulars** | **Vegetables consumed/ family from nutri-garden (Kgs.)** | **Vegetables consumed by 25 families (Kgs.)** | **Vegetables provided to neighbours/ family (Kgs.)** | **Vegetables provided to neighbours& relatives (Kgs.) by 25 famlies** | **Vegetables sold by families**  **(Kgs.)** | **Vegetables sold by 15 families**  **(Kgs)** | **Amount generated (Rs.)** | | |
| **Neighbors** | **Sold** | **Total** |
| Quantity (Kgs.) | 87 | 2175 | 25 | 625 | 15.80 | 237 | 25000 | 9480 | 34480 |

It is observed from the table-6 that, 625 kgs of vegetables were provided to neighbors, friends and relatives worth of Rs.25000/- through barter system. Similarly, 237 kgs of vegetables like radish, brinjal, onion, winged beans, palak etc., grown in excess were sold in the market as these are high perishable as well as high market price during a particular period. Thus on an average, amount of Rs.34,480/- had been generated because of establishment of nutri-garden.

**Conclusion**  :

The demonstration on nutri-garden created awareness on health and nutrition as well as in providing fresh fruits and vegetables to the families. The cost incurred towards purchase of vegetables had been saved. The vegetables were exchanged with neighbours and the excess vegetables were sold in the market. The fruits and other plants mainly guava, papaya, lime, drumstick, curry leaf had started yielding and were relished by the village people.

**PART XIII - LINKAGES**

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

| **Name of organization** | **Nature of linkage** |
| --- | --- |
| University of Agricultural Sciences, Dharwad | Facilitation for READY programme of final year B.Sc (Agri.) Students of College of Agriculture, Dharwad |
| Karnataka State Department of Agriculture | Training programmes, Workshops & serving as Resource Persons in different schemes, joint organisation of extension activities |
| Karnataka State Department of Horticulture | Capacity building training programmes under NHM Scheme |
| Department of Animal Husbandry and Veterinary Services | Organisation of Trainings/Workshop on Livestock Management |
| Command Area Development Authority, Belagavi | Organised training programme on Soil and Water management in Malaprabha Command Area of Naragund block |
| Rural Development and Panchayat Raj University, Gadag | Facilitation and guidance for students belonging to different disciplines of RDPR University, Gadag |
| Reliance Foundation | Capacity Building Programme for FPOs and advisory services for farmers |
| Shree Kshetra Dharmastala Rural Development Foundation | Training programmes for SHG Members and participation as Resource Person |

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

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

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

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

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

KVK provided input on problem identification , prioritization, researchable issues and strategies / technologies for different agro-eco systems in the district

**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** | KVK-ATMA Intefernce Meetings and ATMA Steering Committee meetings | 2 | 3 | - |
| 02 | **Research projects** | - | - | - | - |
| 03 | **Training programmes** | * ICM in Kharif & Rabi crops * Post Harvest Technology * Farmers’ Producers Organisation * Integrated Farming System * Food Processing | - | 6 | - |
| 04 | **Demonstrations** | - | 7 | 3 | Jointly organised with ATMA funding |
| 05 | **Extension Programmes** |  | 12 | 7 | Jointly organised with ATMA funding |
|  | Kisan Mela |  | - | - | - |
|  | Technology Week |  | 1 | 1 | Jointly organised with ATMA funding |
|  | Exposure visit |  | - | - |  |
|  | Exhibition |  | - | - | - |
|  | Soil health camps |  | - | - | - |
|  | Animal Health Campaigns |  | - | - | - |
|  | Others (Pl. specify) |  | - | - | - |
|  | Field Day |  | 4 | 2 | Jointly organised with ATMA funding |
|  | Jal Shakti Abhiyaan |  | - | - | - |
|  | World Food Day |  | - | - | - |
|  | International Womens’ Day |  | - | - | - |
|  | World Soil Health Day |  | 1 | 1 | Jointly organised with ATMA funding |
|  | Farmers’ field school | - | 3 | - | - |
|  | Farmer-Scientist Interaction Meet | - | - | 2 | Jointly organised with ATMA funding |
| 06 | **Publications** |  |  |  |  |
|  | Video Films | - | - | - | - |
|  | Books | - | - | - | - |
|  | Extension Literature | - | 3 | - | Material development by KVK for literature |
|  | Pamphlets | - | - | - | - |
|  | Others (Pl. specify) | - | - | - | - |
| 07 | **Other Activities**  **(Pl. specify)** |  |  |  |  |

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

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

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

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

**13.F. Details of linkage with RKVY : NIL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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** | **Message type (Text/Voice)** | **SMS/voice calls sent (No.)** | | | | | | **Total SMS/ Voice calls sent (No.)** | **Farmers (No.)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop** | **Livestock** | **Weather** | **Marketing** | **Awareness** | **Other enterprises** |
| January 21 | Text | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1268 |
| February 21 | Text | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1268 |
| March 21 | Text | 2 | 1 | 0 | 0 | 0 | 1 | 4 | 1280 |
| April 21 | Text | 2 | 1 | 3 | 0 | 1 | 0 | 7 | 1200 |
| May 21 | Text | 3 | 1 | 4 | 1 | 0 | 1 | 10 | 1265 |
| June 21 | Text | 1 | 0 | 4 | 0 | 1 | 0 | 6 | 1265 |
| July 21 | Text | 2 | 1 | 3 | 1 | 1 | 0 | 8 | 8000 |
| August 21 | Text | 3 | 0 | 2 | 1 | 0 | 1 | 7 | 1200 |
| September 21 | Text | 2 | 1 | 4 | 0 | 1 | 0 | 8 | 2000 |
| October 21 | Text | 2 | 1 | 3 | 0 | 0 | 0 | 6 | 1080 |
| November 21 | Text | 3 | 0 | 2 | 0 | 1 | 1 | 7 | 1200 |
| December 21 | Text | 2 | 1 | 0 | 1 | 2 | 2 | 8 | 1245 |
| **Total** |  | **26** | **7** | **25** | **4** | **7** | **6** | **75** | **22271** |

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

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Demo Unit** | **Year of**  **establishment** | **Area**  **(ha)** | **Details of production** | | | **Amount (Rs.)** | | **Remarks** |
| **Variety** | **Produce** | **Qty.** | **Cost of inputs** | **Gross income** |
| 1 | Green House | 2007 | 250 sq.ft | Alphonso Mangoes | Grafts | 600 | 4500 | 12000 | - |
| 2 | Green House | 2007 |  | Chilli | Seedlings | 3000 | 700 | 3000 | - |

**14.B. 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.**  **(Qtl)** | **Cost of inputs** | **Gross income** |
| **Cereals** |  |  |  |  |  |  |  |  |  |
| Rabi Sorghum | 18.10.21 |  | 3.2 | SPV-2217 | Seeds | 20.0 | 12500 | 5000 | Expected |
| Pearl Millet | 07.07.21 | 19.10.21 | 0.3 | VPMH-14  VPMH-7  Kaveri  Super Boss | Grains | 4.0 | 1500 | 1200 |  |
| **Pulses** |  |  |  |  |  |  |  |  |  |
| Greengram | 08.06.21 | 21.08.21 | 1.0 | DGGV-2 | Seeds | 8.0 | 4500 | 60000 |  |
| Bengalgram | 18.10.21 |  | 3.6 | JAKI-9218  DBGV-204 | Seeds | 20.0 | 33750 | 100000 | Expected |
| **Oilseeds** |  |  |  |  |  |  |  |  |  |
| Groundnut | 07.07.21 | 02.11.21 | 0.8 | DGRMB-24  Kadiri  Lepaxshi (K-1812) | Seeds | 3.0 | 23500 | 15000 |  |
| Safflower | 17.10.21 |  |  | ISF-764 | Seeds | 15.0 | 21500 | 90000 | Expected |
| **Fibers** |  |  |  |  |  |  |  |  |  |
| **Spices & Plantation crops** | | | | | | | | | |
| Cashewnut |  |  | 1.20 | Vengurla-4 | Nuts | 11.0 |  | 104500 | - |
| **Floriculture** |  |  |  |  |  |  |  |  |  |
| **Fruits** |  |  |  |  |  |  |  |  |  |
| Tamarind |  |  | 0.60 | PKM-1 & DTS-1 | Fruit | 16.0 |  | 64000 | - |
| Amla |  |  | 0.60 | Krishna, Kanchan | Fruit | 11.5 |  | 23000 | - |
| Mango |  |  | 0.80 | Alphonso | Fruit | 12.0 |  | 48000 | - |
| **Vegetables** |  |  |  |  |  |  |  |  | - |
| Onion | 06.07.21 | 04.12.21 | 0.8 | Bhima Super | Bulb |  | 25000 |  | Crop failed due to excess rainfall |
| Onion seed production | 11.12.21 |  | 0.3 | Bhima Super | Seeds | 1.0 | 41000 | 100000 |  |
| **Others (specify)** |  |  |  |  |  |  |  |  |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Name of the Product** | **Qty** | **Amount (Rs.)** | | **Remarks** |
| **Cost of inputs** | **Gross income** |
| 1 | Vermicompost | 145.0 Qtl | 25500 | 58000 | - |
| 2 | Earthworms | 1.80 Qtl | 19275 | 54025 | - |
| 3 | Azolla | 0.08 Qtl | 600 | 825 | - |

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No** | **Name**  **of the animal / bird / aquatics** | **Details of production** | | | **Amount (Rs.)** | | **Remarks** |
| **Breed** | **Type of Produce** | **Qty.** | **Cost of inputs** | **Gross income** |
| 1 | Buffaloes | Local | Milk | 3734 lit | 89500 | 132511 | - |
| 2 | Sheep | Rambullet local cross | Lamb | 2 lamb | 2500 | 6500 | - |
| 3 | Goat | Jamunapuri local cross | Kid | 1 kid | 2000 | 3500 | - |

**14E. Utilization of hostel facilities**

Accommodation available (No. of beds) : 30

| **Months** | **No. of trainees stayed** | **Trainee days (days stayed)** | **Reason for short fall**  **(if any)** |
| --- | --- | --- | --- |
| January 2021 | 20 | 1 | - |
| February | 59 | 11 | - |
| March | 38 | 33 | - |
| April | 0 | 0 | - |
| May | 0 | 0 | - |
| June | 0 | 0 | - |
| July | 90 | 7 | - |
| August | 30 | 4 | - |
| September | 66 | 15 | - |
| October | 46 | 18 | - |
| November | 0 | 0 | - |
| December | 174 | 12 | - |

**14F. Database management**

| **S. No** | **Database target** | **Database created** |
| --- | --- | --- |
| 1 | OFT | Already maintained |
| 2 | FLD | Already maintained |
| 3 | Training database | Already maintained |
| 4 | Seeds & planting material | Already maintained |
| 5 | All Extension activities | Already maintained |
| 6 | Farmers visiting to KVK | Already maintained |
| 7 | Field visits | Already maintained |
| 8 | District database | Already maintained |
| 9 | Soil & water test details | Already maintained |
| 10 | Database on KVK (i.e regarding KVK details, host institute details, staff information, KVK land information, KVK infrastructure, demo units, vehicle, office, lab, farm equipment & library) | Already maintained |
| 11 | HRD of KVK staff (i.e training/seminar/workshop attended by KVK staff) | Already maintained |
| 12 | Publications of KVK activities in news papers | Already maintained |
| 13 | Villages covered by KVK since inception | Already maintained |
| 14 | Kisan mobile advisory services – Subscribers and messages sent | Already maintained |
| 15 | Farm implements | Already maintained |
| 16 | Citizen’s Client Charter | Already maintained |

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

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 Demonstrations** | **No. of plant materials produced** | **Visit by farmers**  **(No.)** | **Visit by officials**  **(No.)** |
| 850000 | 850000 | Graded bund construction | 5054.68 cm | 5 | 2 | 0 | 185 | 17 | 340 | 4.0 ha |
|  |  | Construction of waste weirs  1)1.52 feet crust length  2)1.83 feet crust length  3) 2.44 feet crust length  4) 2.74 feet crust length  5) 3.00 feet crust length | 5 Nos.  7 Nos.  4 Nos.  3 Nos.  3 Nos. |  |  |  |  |  |  |  |
|  |  | Farm pond | 2 Nos. |  |  |  |  |  |  |  |
|  |  | Infiltration wells   1. Infiltration Well 2. Common tank | 9 Nos.  1 No. |  |  |  |  |  |  |  |
|  |  | Bore well recharge pit | 1 No. |  |  |  |  |  |  |  |
|  |  | Sub surface dam | 2 Nos. |  |  |  |  |  |  |  |
|  |  | Soak pits | 147 |  |  |  |  |  |  |  |
|  |  | Check dam | 1 |  |  |  |  |  |  |  |

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 Demonstrations** | **No. of plant materials produced** | **Visit by farmers**  **(No.)** | **Visit by officials**  **(No.)** |
|  |  |  |  |  |  |  |  |  |  |  |
| 150000 | 150000 | Drip irrigation system for Dry land Horticulture | 5 Ha. | 2 | 2 | 0 | 185 | 17 | 0 | 5 Ha. |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
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**PART XV – SPECIAL PROGRAMMES**

**15.1 Paramparagath Krishi Vikas Yojana (PKVY) : NIL**

| **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)** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 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 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |

**15.3 Fertilizer awareness programme 2021**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **State** | **Name of KVK** | **Details of Activities/programme Organised** | **Number of Chief Guests** | **No. of Farmers attended program** | **Total participants** |
| Karnataka | ICAR-KVK, Gadag | * Online training programme * Video on soil sample collection and soil testing laboratory were screened during programme to provide complete information to participants. | 2 | 62 | 64 |

**15.4 Seed Hub : NIL**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Crops*** | ***Variety*** | ***Year of release*** | ***Production*** | | | | ***Remarks*** |
| ***Target (q)*** | ***Area (ha.)*** | ***Actual Production***  ***(q)*** | ***Category***  ***(FS/CS)*** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**15.5 CFLD on Oilseeds:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Crop** | **Varieties demonstrated & Check** | | **Allocated** | | **Implemented** | |
| **Area (ha)** | **Demos (No.)** | **Area (ha)** | **Demos (No.)** |
| **Demo** | **Check** |
| 1 | Groundnut | DH-256 | TMV-2 | 20 | 50 | 20 | 50 |
|  | **Total** |  | | **20** | **50** | **20** | **50** |

**15.6 CFLDs on Pulses:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Crop** | **Varieties demonstrated & Check** | | **Allocated** | | **Implemented** | |
| **Area (ha)** | **Demos (No.)** | **Area (ha)** | **Demos (No.)** |
| **Demo** | **Check** |
| 1 | Greengram | DGGV-2 | Shining Moong | 10 | 25 | 10 | 25 |
| 2 | Bengalgram | JAKI-9218 | JG-11 | 10 | 25 | 10 | 25 |
|  | **Total** |  | | **20** | **50** | **20** | **50** |

**15.7 Krishi Kalyan Abhiyan : NIL**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| Training programme on efficient use of fertilizer and water through drip irrigation | 30-12-2021 | 41 | 0 | 41 | 9 | 0 | 9 | 15 | 0 | 15 |
| Training programme on efficient use of fertilizer and water through drip irrigation | 11-01-2021 | 49 | 0 | 49 | 11 | 0 | 11 | 15 | 0 | 15 |

**15.9 Tribal Sub-Plan (TSP) : NIL**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 : NIL**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**15.11 NARI : NIL**

|  |  |  |
| --- | --- | --- |
| **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) |  |  |
| 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 |  |  |
| Extension Activities |  |  |

**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** |
| **1588** | **12** | **Y** | **N** | **N** | **Y** | **Y** | **Y** | **Y** | **Y** | **Y** | **Y** | **Y** | **Y** |

**15.13 KSHAMTA : NIL**

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

**15.14 DFI : KVK has intervened with 110 families during the year 2020 among 133 families surveyed under 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 | Gadag | Gadag, Shirahatti, Naragund, Mundaragi and Shirol | Chikkasavanur, Shingatarayanakeri and Gadag | 110 | 71095 | ***Crops:***  Maize, Rabi Sorghum, Bt.Cotton, Groundnut, Greengram, White Onion, Chrysanthemum, Vegetables (Okra, Ridgegourd, Dolichos bean, Beans and Coriender)  ***Enterprises:***  Dairy  Nutri Garden | * Maize+ Redgram intercropping system with ICM practices * Introduction of SPV-2217 variety in Rabi Sorghum * Bt.Cotton+ Greengram intercropping system with ICM practices * Introduction of DH-256 variety of Grounndut along with ICM practices * Introduction of DGGV-2 variety with ICM practices * Introduction of Arka Shweta and Arka Shubra white Onion varieties * ICM in Chrysanthemum * Demonstration of vegetable cafeteria (Introduction of improved varieties of Okra, Ridgegourd, Dolichos bean, Beans and Coriender * Nutrient management in milch animals * Demonstration of nutri garden | 149386 | 220481 |

**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 | **Groundnut**   * GPBD-4 | * Early maturity than TG-37 A and DGRMB-24. * Two seeded pods * Resistant to rust and late leaf spot |
| * TG-37A | * Semidwarf variety with more number of three seeded pods * Tolerant to collar rot disease |
| * DGRMB-24 | * High yielding variety under rainfed condition |
| 2 | **Greengram**   * DGGV-2 | * High yielding variety * Non shattering nature suits well to mechanical harvesting |
| 3 | **Ridgegourd**   * Arka Prasanna | Arka Prasan is an early variety, gives more yield with low incidence of powdery mildew. Fruits are tender with good taste and cooking quality |
| 4 | **Dolichos bean**   * Hebbal Avare-3 | Good yield, good marketability and consumer acceptability |
| 5 | **Seed production of Onion**   * Bheema Super | * Availability of pure seeds of improved variety in their own farm. * There is ample opportunity for farmer to become seed production entrepreneur for better income |

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

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Agronomic practices** | **Farmer’s feedback** |
| 1 | Seed treatment of Trichoderma in Groundnut | Helps to reduce Root rot disease |
| 2 | Seed treatment with Biofertilizers like Rhizobium and PSB | Helps to reduce use of nitrogenous and phosphatic fertilizers |
| 3 | Use of pulse magic in Greengram | Foliar spray of Pulse magic in Greengram at flowering stage helped in healthy growth of plant without any deficiency symptoms besides increasing number of pods per plant. This practice resulted in higher grain yield. |
| 4 | Micronutrient management in Chrysanthemum crop | There was complete opening of flowers and tight buds with bright colored flowers were obtained and also flowers fetched good market price |

**16.3 Farmers feedback onperformance of pest and disease management in crops**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Pest and disease management in crops** | **Farmer’s feedback** |
| 1 | Groundnut | Collar rot and Leaf sport diseases were identified in groundnut crop. Integrated management practices like seed treatment with fungicides, crop rotation practices, summer ploughing and green manuring along with chemical management practices helps to reduce collar rot and leaf spot incidence in groundnut crop. |
| 2 | Greengram | Major pests like thrips, Aphids and Pod borer and incidence of disease like powdery mildew was noticed during cultivation. Adoption of Integrated crop management practices in demonstrated plots helped in reduction of pest and disease occurrence. |
| 3 | Bud borer and Leaf spot management in chrysanthemum crop | Due to application of neem cake there was very less incidence of bud borer & termite but cost of the neem cake is more and timely management of *Alterneria* leaf spot resulted in to good crop load |
| 4 | Pest and disease management in Green chilli crop | Due to application of neem cake and *Trichoderma viridae* incidence of damping off in nursery seedlings and collar rot was delayed by 10-15 days and application of Arka microbial consortium resulted in better crop stand and better fruit set. timely management of anthracnose, Murda complex disease lead to get 25-30% additional yield compared to local practices |

**16.4 Farmers feedback on performance of farm machinery technologies**

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

**16.5 Farmers feedback on performance of livestock and fisheries technologies**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Livestock/fisheries technologies** | **Farmer’s feedback** |
| 1 | CB Cows | Feeding of green fodder enhances the milk yield and improves the health of the CB cows |

**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 | SBI | Gadag | 0838 | KHP KVK Hulkoti | 10824829153 | 582002002 | SBIN0000838 |

**17B. Utilization of KVK funds during the year 2020-2021 (Rs. in lakh)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 20262127 | 20262127 | 20262127 |
| 2 | **Traveling allowances** | 78000 | 78000 | 78000 |
| 3 | **Contingencies** | | | |
| ***A*** | **Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)** | 290000 | 290000 | 290000 |
| ***B*** | **POL, repair of vehicles, tractor and equipments** | 334000 | 334000 | 334000 |
| ***C*** | **Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)** | 100000 | 100000 | 100000 |
| ***D*** | **Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)** | 50000 | 50000 | 50000 |
| ***E*** | **Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)** | 283000 | 283000 | 283000 |
| ***F*** | **On Farm Testing (on need based, location specific and newly generated information in the major production systems of the area)** | 136000 | 136000 | 136000 |
| ***G*** | **Integrated Farming System** | 0 | 0 | 0 |
| ***H*** | **Training of Extension Functionaries** | 25000 | 25000 | 25000 |
| ***I*** | **Extension activities** | 41000 | 41000 | 41000 |
| ***I*** | **EDP / Innovative activities** | 30000 | 30000 | 30000 |
| ***J*** | **Maintenance of buildings** | 50000 | 50000 | 50000 |
| ***K*** | **Establishment of Soil, Plant & Water Testing Laboratory and issue of Soil Health Cards** | 25000 | 25000 | 25000 |
| ***M*** | **Nutri Garden** | 25000 | 25000 | 25000 |
| ***N*** | **Library Maintenance** | 10000 | 10000 | 10000 |
| **TOTAL (A)** | | **21739127** | **21739127** | **21739127** |
| **B. Non-Recurring Contingencies** | |  |  |  |
| 1 | **Works** | 0 | 0 | 0 |
| 2 | **Equipments including SWTL & Furniture** | 243000 | 243000 | 243000 |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 0 | 0 | 0 |
| 4 | **Library** (Purchase of assets like books & journals) | 0 | 0 | 0 |
| **TOTAL (B)** | | **0** | **0** | **0** |
| **C. REVOLVING FUND** | | 0 | 0 | 0 |
| **GRAND TOTAL (A+B+C)** | | **21982127** | **21982127** | **21982127** |

**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 | 4.648 | 14.373 | 12.408 | 6.613 |
| January to December 2020 | 6.613 | 8.986 | 11.534 | 4.065 |
| January to December 2021 | 4.065 | 6.724 | 5.184 | 5.605 |

**18. Details of HRD activities attended by KVK staff**

| **Name of the staff** | **Designation** | Title of the training programme | Institute where attended | Dates |
| --- | --- | --- | --- | --- |
| Mr.S.H.Adapur | SMS (Ag.Extension) | Webinar on FPO | Organised by NCDC | 05 March 2021 |
| Webinar on Bhumi Suposhan - Nationa level awareness campaign | ICAR,New Delhi | 15 April 2021 |
| Workshop on Impact assessment of KVK interventions for enhancing farm income | ICAR-ATARI, Jodhapur | 22 April 2021 |
| Online meeting with IMD and GKMS | IMD, New Delhi | 27 April 2021 |
| Online meeting with NRLM, Bengaluru on IFS project |  | 18 May 2021 |
| Virtual Farmers' Field School | ATARI, Bengaluru and UAHS, Shivamogga (Virtual) | 14 June 2021 |
| Capacity building training on ASCI courses | ASC and ATARI, Bengaluru | 14 July 2021 |
| KVK Zonal Workshop | ICAR-ATARI, Bengaluru | 30 July 2021 |
| Convergence of ICAR-KVKs service for sericulture extension | Central Sericulture Research and Training Institute, Central Silk Board, Mysuru | 13-17, September 2021 |
| Mr. N.H.bhandi | SMS (Soil Science) | Contingent crop planning | Online organised by CRIDA, Hyderabad and ATARI,Bengaluru | 10 June 2021 |
| Workshop on DFI | UAS, Dharwad | 15 September 2021 |
| Fifth international Agronomy congress on Agri innovations to combat field and nutrition challenges | PJTSAU, Hyderabad | 23-27, November 2021 |
| Mrs. Hemavati R.H. | SMS (Horticulture) | ATARI meeting on Road map on IPM | NCIPM | 28 January 2021 |
| Entrepreneurship opportunities in post harvest technologies | ICAR-NIVEDI, Bengaluru | 29 January 2021 |
| New paradigms in production and utilization of fruits and vegetables for health and livelihood | Confederation of horticulture associations of India | 11 February 2021 |
| Cultivation of rose and jasmine under open field | Karnataka farmers resource centre, Bagalkot | 12 February 2021 |
| Sustainable farmers-friendly transferable technologies to enhance income of farmers in Arid zone | CAZRI-Jodhpur, Rajastan | 15 February 2021 |
| KVKs as leaders in natural farming education | National Coalition for natural farming | 25 February 2021 |
| Women leadership in agriculture : Entrepreneurship, equity and empowerment |  | 8 March 2021 |
| Strenthening farmers participatory value chain management in Onion and Garlic | DOGR, Pune & MANAGE, Hyderabad | 03-07, May 2021 |
| Mushroom cultivation & entrepreneurship | KVK, Bagalkoti | 11 May 2021 |
| Importance of trainings & pruning and pest management in Mango | KVK, Haveri | 13 May 2021 |
| Advances in Okra crop cultivation | Karnataka farmers resource centre, Bagalkot | 12 May 2021 |
| Improved Coconut cultivation practices | KVK, Konahalli, Tipatur, Tumakur | 12 May 2021 |
| Selection of right varieties for Kharif season | KVK, Kalaburgi | 15 May 2021 |
| Agro-forestry | KVK, Gangavati, Koppal | 15 May 2021 |
| Integrated pest management in Cashew crop | KVK Kolar & Horticulture Department, Kolar | 21 May 2021 |
| Improved cultivation practices of Onion | Karnataka farmers resource centre, Bagalkot | 18 May 2021 |
| Scientific method of Beekeeping and its importance | KVK, Indi | 20 May 2021 |
|  |  | Beekeeping : Bee engaged build back better for bees | KVK, Dharwad | 20 May 2021 |
| Agro-forestry for better income | KVK, Dharwad & Division of Social forest, Dharwad | 24 May 2021 |
| Processing and value addition of Guava and Custard apple | College of Horticulture, Sirsi | 25 May 2021 |
| Sustainable integrated cropping & farming system models with special reference to banana for enhanced income for farmers | ICAR-NRC, Bengaluru | 07 July 2021 |
| Canopy architecture management in perennial commercial horticulture crop | Bidar (UHS, Bagalkot) | 19-20, July 2021 |
| National webinar on Banana Value Chain & marketing - New business horizon | ICAR-NRC, Banana | 21 August 2021 |
| Dr. Sudha V. Mankani | SMS (Home Science) | Super foods for healthy living | Sustainable food research development and KALSA Foundation | 24 January 2021 |
| Mushroom cultivation | ICAR-IIHR, Bengaluru | 9-11, August 2021 |
| Soilless terrace gardening | ICAR-IIHR, Bengaluru | 11 August 2021 |
| Dr. Gururaj Kombali | SMS (Agronomy) | Webinar on Agriculture technology | Organised by Kisan Mitra, Govt. of India | 13 November 2021 |
| Workshop on natural farming | Organised by NITI Aayog | 30 November 2021 |
| Advances in IPM strategies for important crops of Karnataka and Kerala for ATARI, Zone XI | Organised by ATARI and NCIPM | 21-23, October 2021 |
| Dr. B.M.Murgod | Programme Assistant (Animal Science) | Clean milk production | ICAR-National Dairy Research Institute | 26 November 2021 |

**19 ) Please include any other important and relevant information which has not been reflected above (write in detail). Like details regarding FPO formation, Achievements during COVID-19 lockdown period.**

1. **EDP ON VALUE ADDITION AND MARKETING OF TAMARIND**

Tamarind as the age old crop grown in Gadag distict. Farmers used to lease the plants which fetches low price in the market. In order to promote value addition and to get higher returns from the Tamarind, the EDP on value addition and marketing of Tamarind products was initiated.

**Objectives:**

* To imbibe EDP skills in marketing of Tamarind products
* To get an additional employment through preparation of Tamarind products
* To enhance the income of farm families

**Activities conducted:**

* Implemented EDP by taking Pruthvi SHG from Shingatarayanakeri village of Mundaragi block
* Three training on value addition and 3 trainings on packing, labeling and marketing of Tamarind products
* Prepared labels and facilitated packing materials for marketing of tamarind products
* Facilitated to participated in Exhibition & fairs for marketing of Tamarind products
* Initiated sales of Tamarind products to ASF’s Organic Sales Unit and local shops & petty shops

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the SHG** | **Name of the SHG Member** | **Village** | **Taluk** | **Date of initiation** |
| Pruthvi SHG | Girija Gadagin | Asundi | Gadag | Februray 2021 |

**Production of tamarind products**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the product** | **Quantity produced**  **(Per month)** | **Quantity produced (10 months period)** | **Rate / Piece or Kg (Rs.)** | **Total (Rs.)** |
| Tamarind lollypop (Big size) | 1000 | 10000 | 3.5 | 35000 |
| Tamarind lollypop (Small size) | 2000 | 20000 | 1.5 | 30000 |
| Tamarind chutney | 5 Kg | 50 Kg | 120 | 6000 |
|  |  |  | **Total (Rs.)** | **71000** |