**ICAR-KRISHI VIGYAN KENDRA, GADAG**

**ANNUAL REPORT - 2018-19**

**(FOR THE PERIOD FROM 01 APRIL 2018 TO 31 MARCH 2019)**

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

**Gadag district, Karnataka State**

**Pincode: 582205**

**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.khpkvk.org |

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 | laxs1961@gmail.com |

1.4. Year of sanction:

**1.5. Staff position as on 31 March 2019**

| **Sl.**  **No.** | **Sanctioned post** | **Name of the incumbent** | **Designation** | **M/F** | **Discipline** | **Highest Qualification**  **(for PC, SMS and Prog. Asstt.)** | **Pay**  **Scale** | **Basic pay** | **Date of joining KVK** | **Permanent**  **/Temporary** | **Category (SC/ST/**  **OBC/**  **Others)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Head/ Senior Scientist | Dr. L.G. Hiregoudar | Programme  Coordinator | M | Crop Physiology | M.Sc (Agri), PhD | 37400-67000+ 10000 | 67000 | 19.10.1985 | P | OBC |
| 2 | Scientist/SMS | Mr. S.K. Mudlapur | Subject Matter  Specialist | M | Plant Protection | B.Sc (Agri) | 15600-39100+ 7600 | 35000 | 22.07.1985 | P | OBC |
| 3 | Scientist/SMS | Mr. S.H. Adapur | Subject Matter  Specialist | M | Ag. Extension | M.Sc (Agri) | 15600-39100+ 7600 | 33780 | 22.11.1990 | P | Others |
| 4 | Scientist/SMS | Dr. Sudha V. Mankani | Subject Matter  Specialist | F | Home Science | M.H.Sc,  PhD | 15600-39100+ 7600 | 33780 | 20.07.1993 | P | OBC |
| 5 | Scientist/SMS | Mr. V.D. Vaikunthe | Subject Matter  Specialist | M | Agronomy | B.Sc (Agri) | 15600-39100+ 7600 | 33780 | 23.07.1985 | P | OBC |
| 6 | Scientist/SMS | Mr. N.H. Bhandi | Subject Matter  Specialist | M | Soil Science | M.Sc (Agri) | 15600-39100+ 6000 | 26510 | 01.06.2005 | P | OBC |
| 7 | Scientist/SMS | VACANT | Subject Matter  Specialist | - | Horticulture | - | - | - | - | - | - |
| 8 | Programme Assistant ( Lab Tech.) | Dr. B.M. Murgod | Programme Assistant | M | Animal Science | B.V. Sc | 9300-34800+ 4600 | 16460 | 25.06.2007 | P | Others |
| 9 | Programme Assistant (Computer) | Smt. L.S.Asuti | Computer  Programmer | F | - | M.Sc (IT) | 9300-34800+ 4600 | 17750 | 01.06.2005 | P | OBC |
| 10 | Programme Assistant/ Farm Manager | Mr. Suresh L. Halemani | Farm Manager | M | - | B.Sc (Agri.) | 9300-34800+ 4200 | 13580 | 01.02.2011 | P | OBC |
| 11 | Assistant | Mr. M.B. Jakkanagoudar | Assistant | M | - | M.Com | 9300-34800+4600 | 16460 | 25.06.2007 | P | OBC |
| 12 | Jr. Stenographer | Mr. T.K. Sai Swaroop Rao | Jr. Stenographer | M | - | SSC & Certificate in Stenography | 5200-20200  +2400 | 5430 | 15.12.2016 | P | OBC |
| 13 | Driver - 1 | Mr. N.L. Hadapad | Auxiliary staff | M | Driver-Cum- Mechanic | 7th Std. | 5200-20200+ 2400 | 13220 | 03.09.1992 | P | OBC |
| 14 | Driver - 2 | Mr. G.D. Madivalar | Auxiliary staff | M | Driver-Cum-Mechanic | 7th Std. | 5200-20200+ 2400 | 11890 | 26.06.1995 | P | OBC |
| 15 | SS-1 | Mr. V.R. Navalli | Supporting staff | M | Field Assistant | SSLC | 5200-20200+ 2400 | 10310 | 20.07.1993 | P | OBC |
| 16 | SS-2 | VACANT | Supporting staff | - | - | - | - | - | - | - | - |

**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.) | 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.)** | **Total kms. Run** | **Present status** |
| Jeep  (Mahindra Bolero) | 2009 | 6.00 | 185965 | Good |
| Tractor | 2003 | 5.00 | 9937 Hrs | Need replacement |
| Motor cycle - I | 2004 | 0.40 | 67303 | Good |
| Motor cycle - II | 2009 | 0.50 | 50604 | Good |

**C) Equipment & AV aids**

| **Name of the equipment** | **Year of purchase** | **Cost**  **(Rs. in lakhs)** | **Present status** |
| --- | --- | --- | --- |
| Computer | 2008 | 1.00 | Good |
| Digital Amplifier with Public Address System | 2013 | 0.36 | Good |
| OHP | 2004 | 0.25 | Good |
| Motorised projection screen | 2013 | 0.21 | Good |
| White board | 2013 | 0.14 | Good |
| LED display board | 2013 | 0.10 | Good |
| Hipro lab model gin machine | 2006 | 0.70 | Good |
| Seed delinting machine | 2006 | 0.18 | Good |
| Cotton seed sorter | 2007 | 0.50 | Good |
| Seed treatment drum | 2007 | 0.40 | Good |
| Lap top Computer | 2007 | 0.53 | Not Good |
| LCD | 2007 | 0.45 | Good |
| Ceramic black board | 2007 | 0.12 | Good |
| Rotavator | 2008 | 0.75 | Good |
| Rotary weeder | 2009 | 0.84 | Good |
| Laser guided land leveler | 2011 | 3.89 | Good |
| Power tiller | 2011 | 2.72 | Good |
| Lab equipments for dairy and goatery | 2011 | 0.50 | Good |
| Generator | 2011 | 1.00 | Good |
| EPBAX system | 2011 | 0.50 | Good |
| Equipments of Plant health diagnostic unit | 2011 | 10.00 | Good |
| Laptop computer | 2016-17 | 0.589 | Good |
| Desktop computer | 2016-17 | 0.25 | Good |
| Printer | 2016-17 | 0.181 | Good |
| Copier | 2016-17 | 0.595 | Good |
| Projector | 2016-17 | 0.48 | Good |
| Digital camera | 2016-17 | 0.242 | Good |
| Pico projector | 2016-17 | 0.145 | Good |
| Amplifier | 2016-17 | 0.055 | Good |
| Class room chairs | 2016-17 | 0.21 | Good |
| File cabin | 2016-17 | 0.20 | Good |
| Hostel furniture | 2016-17 | 0.59 | Good |

**1.8. Details of SAC meeting conducted during 2018-19**

| **Date** | **Number of Participants** | **Salient Recommendations** | **Action taken** | **Remarks, if any** |
| --- | --- | --- | --- | --- |
| 08-03-2019 | 16 | Make a farm trial of newly releasing Maize Hybrid from UAS, Raichur which is drought tolerant and test it in Gadag district under rainfed situation | The major recommendations are for the year 2019-20 and these are included in Action Plan of 2019-20. |  |
| Advise FPOs to adopt IFS Models in their fields during training and extension activities as is done in Pune area by some FPOs. |
| Advise farmers through trainings/ demonstrations/ extension activities to adopt drip/sprinkler irrigation in place of flood irrigation to reduce wastage of precious irrigation water under drought situations occurring almost every year in Gadag district |
| Facilitate farmers to adopt various IFS Models suitable to district to ensure weekly/monthly/seasonal/annual income to them through trainings and extension activities |
| Advise farmers during trainings to use Organic Manures and Green Manure crops so as to enhance moisture holding capacity in the soil to mitigate the drought conditions |
| In Onion crop, advise farmers to use post-emergent herbicides to reduce the cost of cultivation. Further advise them to use CAN or SSP fertilizers in Onion crop to get higher yield as well as good quality bulbs during training programmes on Onion. |
| Advise chilli growing farmers during trainings to put Foxtail Millet as border crop as well as 2 rows after every 15 rows in Chilli crop to reduce the incidence of Sucking Pests viz., thrips and mites. |
| Encourage farmers to use detachable drip system for all field crops for efficient use of irrigation water to get good yields through trainings and extension activities |
| Demonstrate Hybird Castor in KVK Farm by getting good hybrids from Gujarat State to show suitability and profitability of this crop in drought prone situation in Gadag district. |
| Prepare appropriate contents on rainfall pattern, water use efficiency and success story of farmers to put in electronic media such as YouTube/Website so as to create awareness to farming community. |
| Advise the farmers during trainings to plant the fodder/grasses in the trenches dug for soil & water conservation and enhance seed production quantity |
| Advise farmers during trainings to plant Guinea Grass or Grazing Guinea Grass (drought tolerant) in Cashew Orchards |
| Advise farmers during trainings to plant fodder trees on bunds such as Sesbenia, Caliandra & Subabul (Shyseeder) |
| Double the seed production quantity during next year 2019-20, so that large number of farmers can get good seeds produced by KVK. |  |
|  | Motivate all farmers in the district to grow millets atleast in 10 Guntas of their land to enable them to consume the same in their daily diet through trainings and extension activities |  |  |
| Arrange one Refresher Course to Input Dealers of the district in collaboration with KSDA. |  |  |
| Create awareness to farmers about utilizing the information given in Soil Health Cards and Land Resource Inventory Cards during training programmes |  |  |
| Extension SMS needs to facilitate FPOs to double their profit through advisories on business plan, export potential areas, e-trading etc. |  |  |
| Home Science SMS needs to facilitate farmers growing Millets with advisories on cleaning/grading/polishing/packing/labeling/marketing as there is huge demand in large city malls for Millet grains. Through this facilitation, farmers can get 2-3 times more income than just selling Millets in open market. |  |  |
| Popularize bio-inputs to reduce the cost of cultivation for doubling of farmers’ income through trainings and demonstrations |  |  |
| Give more thrust to animal nutrition aspects during training programmes of animal husbandry as the district is prone for recurring agricultural droughts |  |  |
| Test / demonstrate resilient crops suitable for changing climate in the district. |  |  |
| Demonstrate Barrel based drip system for marginal farmers cultivating half acre with vegetable crops. So that such farmers can also earn good income even under drought situation. |  |  |

**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: 2015-16)

| Sl. No | Crop | Area (ha) | Production  (Metric tons) | Productivity  (Kg /ha) |
| --- | --- | --- | --- | --- |
|  | **Cereals** |  |  |  |
| 1 | Maize (Protected irrigation) | 55364 | 184140 | 3326 |
| 2 | Rabi Sorghum | 62967 | 39606 | 629 |
| 3 | Wheat (Irrigated) | 16757 | 22504 | 1343 |
|  | **Pulses** |  |  |  |
| 4 | Greengram | 57368 | 25012 | 436 |
| 5 | Bengalgram | 85005 | 53893 | 634 |
| 6 | Redgram | 1540 | 870 | 565 |
|  | **Oilseeds** |  |  |  |
| 7 | Groundnut | 43433 | 27493 | 633 |
| 8 | Sunflower | 42025 | 19205 | 457 |
|  | Commercial crops |  |  |  |
| 9 | Bt. Cotton | 17812 | 13091 | 735 |
| 10 | Onion | 37227 | 152258 | 4.09 tonns |
| 12 | Dry chillies | 12382 | 6339 | 512 |

Source: District Statistical Office

**2.5. Weather data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | Temperature 0 C | | Relative Humidity (%) |
|  |  | Maximum | Minimum |  |
| April, 2018 | 28.5 | 45.30 | 17.20 | 55.70 |
| May, 2018 | 146.3 | 43.50 | 17.70 | 59.51 |
| June, 2018 | 77.6 | 37.90 | 19.60 | 70.27 |
| July, 2018 | 33.6 | 34.40 | 20.20 | 74.40 |
| August, 2018 | 47.0 | 35.30 | 19.80 | 74.96 |
| September, 2018 | 54.5 | 37.70 | 16.70 | 65.96 |
| October, 2018 | 39.0 | 37.40 | 13.00 | 60.17 |
| November, 2018 | 00.0 | 36.40 | 10.10 | 60.00 |
| December, 2018 | 00.0 | 37.00 | 00.00 | 57.98 |
| January, 2019 | 00.3 | 34.20 | 00.00 | 52.08 |
| February, 2019 | 00.2 | 39.50 | 10.30 | 51.97 |
| March, 2019 | 02.9 | 41.20 | 11.30 | 53.48 |

\* Source: KSDA, Gadag and Karnataka State Natural Disaster Monitoring Centre, Bengaluru

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Production** | **Productivity** |
| **Cattle** | | | |
| *Crossbred* | 15418 | 25968 Lit. of milk/day | 5.22 Kg/day |
| *Indigenous* | 158588 | 45944 Lit of milk/day | 2.40 Kg/day |
| **Buffalo** | 80234 | 64088 Lit. of milk/day | 2.80 Kg/day |
| **Sheep** | | | |
| Crossbred |  |  |  |
| *Indigenous* | 313459 | 158 tons/year (meat) | 15 Kg/animal |
| **Goats** | 172411 | 134 tons/year (meat) | 16 Kg/animal |
| **Pigs** |  |  |  |
| *Crossbred* |  |  |  |
| *Indigenous* |  |  |  |
| **Rabbits** |  |  |  |
| **Poultry birds (egg production)** | 158656 | 72 lakh/year | 100 per year |

Source: District Statistical Office Reference year: 2013-14

*Note: The data for the year 2017-18 is not available at District Statics Office / Office of Deputy Directory of AH & VS*

* 1. District profile has been **Updated** for 2018-19 : 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 | Mundaragi | Eklaspur, Haitapur & Venkatapur | Three years | **Crops:** Greengram, Bengalgram, Onion, Rabi Sorghum & Sunflower  **Enterprise:** Buffaloe rearing  Drudgery in farm activities | **Greengram:**   * Cultivation of old China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew | Training and extension activities for ICM in Greengram crop |
| **Bengalgram:**   * Cultivation of old Annigeri-1 variety * Wilt and Rust disease * Pod borer | Training and extension activities for ICM in Bengalgram crop |
| **Onion:**  Low productivity and low keeping quality bulb production in local variety | Demonstration of Arka Kalyan variety |
| **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Introduction of new varieties BJV-44 & SPV-2217 |
| **Sunflower:**   * Imbalanced nutrition * SND * Leaf eating caterpillar and head borer * Powdery mildew | Demonstration of Integrated Crop Management practices |
| **Ashwagandha:**   * Due to moisture stress, loss of yield in field crops * No crop diversification | Demonstration of Arka Ashwagandha variety |
| * Low soil fertility | Organic Input Production and usage |
| **Drudgery in farm activities:**   * Drudgery in post harvest technology | Training and extension activities on drudgery reducing equipments |
| 2 | Ron | Chikkamannur & Savadi | One year | **Crops:** Greengram, Bengalgram, Maize,  Bt. Cotton,  Rabi Sorghum, Safflower & Groundnut  **Enterprise:** CB cows  Nutrition and health, drudgery in farm activities & lack of awareness on post harvest technology | **Greengram:**   * Cultivation of old China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew | Training and extension activities on ICM in Greengram crop |
| **Bengalgram:**   * Cultivation of old Annigeri-1 variety * Wilt and Rust disease * Pod borer | Varietal introduction and Integrated Crop Management practices |
| **Maize:**   * Imbalanced nutrition * Army worm * Turciccum leaf blight | Training and extension activities on ICM in Maize crop |
| **Bt.Cotton:**   * Imbalanced nutrition * Sucking pest * Mirid bug * Flower bud maggots * Pink bollworm * Leaf spot * Leaf reddening | Training and extension activities on ICM in Bt.Cotton crop |
| **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Demonstration of new variety SPV-2217 |
| **Safflower:**     * Cultivation of local variety * Imbalanced nutrition * Aphids and Capsule borer * Leaf spot | Varietal demonstration and Integrated Crop Management practices |
| **Groundnut:**   * Imbalanced nutrition * Collar rot * Leaf defoliator and leaf spot | Training and extension activities on ICM in Groundnut crop |
| **Onion:**   * Low productivity and low keeping quality bulb production in local variety * High incidence of weeds | Demonstration of Arka Kalyan variety |
| **CB Cow:**   * Low milk yield | Demonstration on nutrition and disease management |
| * Low soil fertility | Demonstration on Organic Input Production and usage |
| **Nutrition and health:**   * Lack of awareness on nutrition garden | Awareness activities on nutrition and health |
| **Drudgery in farm activities:**   * Drudgery in Post Harvest Technology | Demonstraton on Drudgery reducing technologies in farm activities |
| 3 | Shirahatti | Ranatur & Devihal | One year | **Crops:** Maize, Bt.Cotton,Chilli, Greengram, Millets  Rabi Sorghum & Onion  **Enterprise**: CB cows, Mulberry, Nutrition and health, drudgery in farm activities & lack of awareness on post harvest technology | **Maize:**   * Mono cropping * Imbalanced nutrition * Army worm * Turciccum leaf blight * Incidence of weed | Demonstration on Intercropping with Redgram and ICM practices |
| **Bt.Cotton:**   * Imbalanced nutrition * Sucking pest * Mirid bug * Flower bud maggets * Pink bollworm * Leaf spot * Leaf reddening | Training and extension activities on ICM in Bt. Cotton crop |
| **Greengram:**   * Cultivation of old China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew | Training and extension activities on ICM in Greengram crop |
| **Millets:**     * Cultivation of local variety of Foxtail and Barnyard millets | Demonstrations for varietal introduction |
| **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Demonstrations for Varietal introduction |
| **Onion (white onion):**   * Low productivity and low keeping quality bulb production * High incidence of weeds | Demonstration of ICM practices in white Onion crop |
| **Planting of Mango and Cashew in red soil under dryland condition:**   * Crop loss/failure due to moisture stress * No crop diversification | Demonstration of dryland horticulture technology by planting Mango and Cashew in red soil |
| **CB Cow:**   * Low milk yield | Demonstration on Nutrition and disease management |
| * Low soil fertility | Demonstration on Organic Input Production and usage |
| **Mulberry:**   * Low yield and low quality mulberry leaf due to imbalanced use of fertilizers and non-use of organic manure | Training and extension activities for ICM in Mulberry |
| **Nutrition and health:**   * Lack of awareness on nutrition | Awareness activities on nutrition and health |
| **Drudgery in farm activities:**   * Drudgery in post harvest technology | Demonstrations on drudgery reducing technologies in farm activities |
| 4 | Naragund | Khanapur, Naganur & Gangapur | Three years | **Crops:** Maize, Bt. Cotton, Wheat, Rabi Sorghum, Bengalgram & Sunflower  **Enterprise:** CB Cows,  Multiple IGAs, Nutrition and health | **Maize:**   * Imbalanced nutrition * Army worm * Turciccum leaf blight * Incidence of weed | Training and extension activities on ICM in Maize crop |
| **Bt.Cotton:**   * Imbalanced nutrition * Sucking pest * Mirid bug * Flower bud maggots * Pink bollworm * Leaf spot * Leaf reddening | Training and extension activities on ICM in Bt.Cotton crop |
| **Wheat:**   * Imbalanced nutrition * Stem borer * Rust | Training and extension activities on ICM in Wheat |
| **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Demonstration of  SPV-2217 variety |
| **Bengalgram:**   * Low productivity of JG-11 variety under protective irrigation | Varietal assessment of  NBEG-3 and  BGD-111-01 varieties |
| **Sunflower:**   * Imbalanced nutrition * SND * Leaf eating caterpillar and head borer * Powdery mildew | Integrated Crop Management demonstrations in Sunflower crop |
|  | * Low soil fertility | Demonstration of Organic Input Production and usage |
| **CB Cow:**   * Low milk yield | Demonstrations on Nutrition and disease management |
| **Multiple IGAs:**   * Lack of awareness on multiple IGAs | Trainings on additional employment activities |
| **Nutrition and health:**   * Lack of awareness on Millets and diet | Awareness activities on Nutrition and health |
| 5 | Gadag | Basapur & Sitalahari | One year | **Crops:** Greengram, Bt. Cotton, Groundnut , Chilli, Onion & Rabi Sorghum  **Enterprise:** CB Cows,  Nutrition and health, drudgery in farm activities & lack of awareness on post harvest technology | **Greengram:**   * Cultivation of old China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew | Training and extension activities on ICM in Greengram crop |
| **Bt.Cotton:**   * Imbalanced nutrition * Sucking pest * Mirid bug * Flower bud maggots * Pink bollworm * Leaf spot * Leaf reddening | Training and extension activities on ICM in Bt. Cotton crop |
| **Groundnut:**   * Imbalanced nutrition * Collar rot * Leaf defoliator and leaf spot | Training and extension activities on ICM in Groundnut crop |
|  | **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Demonstration of new varieties SPV-2217 and BJV-44 |
| * Low soil fertility | Demonstration of organic Input Production and usage |
| **Onion:**   * Low productivity and low keeping quality bulb production in local variety * High incidence of weeds | Demonstration of Arka Kalyan variety |
| **Chilli:**   * Low yield in mixed Byadagi Dabbi variety * Low quality fruit produce * High incidence of pest and disease | Demonstration of Integrated Crop Management in Chilli |
| **Planting of Mango and Cashew in red soil under dryland condition:**   * Crop loss/failure due to moisture stress * No crop diversification | Demonstration of dryland horticulture technology by planting Mango and Cashew in red soil |
| **CB Cow:**   * Low milk yield | Demonstrations on nutrition and disease management |
| **Nutrition and health:**   * Lack of awareness on nutrition garden | Awareness activities on nutrition and health |
| **Drudgery in farm activities:**   * Drudgery in post harvest technology | Demonstrations of Drudgery reducing technologies in farm activities |
| 6 | Gajendragad | Bevinakatti, Alagundi, Gulaguli, Amaragatti & Rudrapur | One year | **Crops**: Sunflower, Greengram, Maize, Rabi Sorghum  **Enterprise**: CB Cows,  Nutrition and health, drudgery in farm activities & lack of awareness on post harvest technology | **Sunflower:**   * Imbalanced nutrition * SND * Leaf eating caterpillar and head borer * Powdery mildew | Demonstration of Integrated Crop Management practices in Sunflower crop |
| **Greengram:**   * Cultivation of old China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew | Demonstration of Integrated Crop Management practices in DGGV-2 variety |
| **Maize:**   * Mono cropping * Imbalanced nutrition * Army worm * Turciccum leaf blight * Incidence of weed | Demonstration of Maize+Redgram Intercropping with Redgram with ICM practices |
| **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Introduction of improved  SPV-2217 variety |
| **Problematic Soil:** | Reclamation of problematic soils |
| * Low soil fertility | Demonstrations on Organic Input Production and usage |
| **Planting of Mango and Cashew in red soil under dryland condition:**   * Crop loss/failure due to moisture stress * No crop diversification | Demonstration of dryland horticulture technology by planting Mango and Cashew in red soil |
| **CB Cow:**   * Low milk yield | Demonstrations on Nutrition and disease management |
| **Nutrition and health:**   * Lack of awareness on nutrition garden | Awareness activities on  Nutrition and health |
| **Drudgery in farm activities:**   * Drudgery in post harvest technology | Demonstration of Drudgery reducing technologies in farm activities |
| 7 | Laxmeshwar | Gojanur & Akkigundi | One year | **Crops:** Greengram, Bt.Cotton, Chilli, Rabi Sorghum, Bunch Groundnut, Bengalgram  **Enterprise:** CB Cows, Mulberry,  Nutrition and health, drudgery in farm activities & lack of awareness on post harvest technology | **Greengram:**   * Cultivation of China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew * Less market price due to non-grading of grains | Demonstration of Integrated Crop Management in DGGV-2 variety |
| **Bt.Cotton:**   * Cultivation of sole crop of Bt.Cotton | Assessment of Bt.Cotton + Greengram intercropping system |
| **Bt.Cotton:**   * Imbalanced nutrition * Sucking pest * Mirid bug * Flower bud maggots * Pink bollworm * Leaf spot * Leaf reddening | Demonstration of Integrated Crop Management practices in Bt.Cotton |
| **Rabi Sorghum:**     * Cultivation of old M 35-1 variety * Shoot fly and Army worm | Introduction of improved SPV-2217 variety |
| **Greengram:**   * Cultivation of old China Moong variety * Yellow mosaic virus * Pod borer * Powdery mildew | Demonstration of Integrated Crop Management practices in DGGV-2 variety |
| **Bunch Groundnut:**   * Imbalanced nutrition * Leaf defoliator and leaf minor * Collar rot * Leaf spot | Training and extension activities on ICM in Bunch Groundnut crop |
| **Bengalgram:**   * Cultivation of old Annigeri-1 variety * Wilt and Rust disease * Pod borer * Less market price due to non-grading of the grains | Demonstration on varietal introduction and Integrated Crop Management practices in Bengalgram |
| * Low soil fertility | Demonstration of organic Input Production and usage |
| **Planting of Mango and Cashew in red soil under dryland condition:**   * Crop loss/failure due to moisture stress * No crop diversification | Demonstration of dryland horticulture technology by planting Mango and Cashew in red soil |
| **Chilli:**   * Low yield * Low quality fruit * High incidence of pest and disease | Trainings on Integrated Crop Management in Chilli crop |
| **CB Cow:**   * Low milk yield | Demonstration on Nutrition and disease management |
| **Mulberry:**   * Low yield and low quality mulberry leaf due to imbalanced use of fertilizers and non-use of organic manure | Training and extension activities on ICM in Mulberry crop |
| **Nutrition and health:**   * Lack of awareness on nutrition garden | Awareness activities on Nutrition and health |
| **Drudgery in farm activities:**   * Drudgery in post harvest technology | Demonstration of drudgery reducing technologies in farm activities |

* 1. **Priority thrust areas**

|  |  |
| --- | --- |
| **S. No** | **Thrust area** |
| 1 | Soil fertility management through production and application of organic manure |
| 2 | Promotion of intercropping systems in Maize and Bt.Cotton crops |
| 5 | Promotion of new JAKI-9218 & BGD-111-01 varieties of Bengalgram |
| 6 | Promotion of SPV-2217 varieties of Rabi Sorghum & DHFt-109-3 varieties of foxtail millet |
| 7 | Biological management of thrips in Onion |
| 8 | Assessment of Bheema Super variety of Onion |
| 9 | Promotion of ICM practices in White Onion |
| 10 | Crop diversification through promotion of Cashew & Ashwagandha |
| 11 | Promotion of nutri-farms |
| 12 | Promotion of drudgery reduction equipments |
| 13 | Primary processing in millets |
| 14 | Livestock nutrition |

**PART III - TECHNICAL ACHIEVEMENTS**

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **OFT** | | | | **FLD** | | | |
| **1** | | | | **2** | | | |
| **Number of OFTs** | | **Number of farmers** | | **Number of FLDs** | | **Number of farmers** | |
| **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** |
| 4 | 4 | 20 | 20 | 17 | 17 | 169 | 169 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training** | | | | **Extension Programmes** | | | |
| **3** | | | | **4** | | | |
| **Number of Courses** | | **Number of Participants** | | **Number of Programmes** | | **Number of participants** | |
| **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** | **Targets** | **Achievement** |
| 54 | 267 | 3870 | 9764 | 681 | 1394 | 38155 | 38500 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed Production (Q)** | | **Planting materials (Nos.)** | |
| **5** | | **6** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 100 | 109.73 | 41500 | 65640 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Livestock, poultry strains and fingerlings (No.)** | | **Bio-products (Kg)** | |
| **7** | | **8** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| 12 | 202 | 16950 | 17010 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**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 livestock (No.)** | **Supply of bio products** | |
| **No.** | **Kg** |
| 1 | Intercropping | Bt.Cotton + Greengram | Low productivity due to mono cropping of Bt.Cotton | Assessment of Bt. Cotton + Greengram (1:2) intercropping system | - | 3 | 0 | 0 | 5 | 0.10 | 0 | 0 | 0 | 0 |
| 2 | ICM | Bt.Cotton | Low productivity | - | IPDM in Bt.Cotton | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| 3 | Intercropping | Maize + Redgram | Low productivity due to mono cropping of Maize |  | Maize+Redgram intercropping system | 2 | 0 | 0 | 5 | 0.30 | 0 | 0 | 0 | 0 |
| 4 | Varietal assessment | Bengalgram | Low productivity due to usage of JG-11 variety | Assessment of NBEG-3 & BGD-111-01 varieties | - | 3 | 0 | 0 | 6 | 2.0 | 0 | 0 | 0 | 0 |
| 5 | ICM | Bengalgram | Low productivity due to usage of Local variety | - | Demonstration of JAKI-9218 & BGD-111-01 varieties | 4 | 0 | 0 | 10 | 26.0 | 0 | 0 | 0 | 0 |
| 6 | Pest management | Onion | Thrips (20%) infestation reducing the yield upto 25-35% | Assessment of thrips management practices in Onion crop | - | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| 7 | Varietal demonstration | Rabi Sorghum | Low productivity of M 35-1 variety | - | Demonstration of SPV-2217 variety | 3 | 0 | 0 | 7 | 5.34 | 0 | 0 | 0 | 0 |
| 8 | Varietal demonstration | Foxtail millet | Low productivity due to local variety usage | - | Demonstration of DHFt-109-3 variety | 2 | 0 | 0 | 5 | 0.60 | 0 | 0 | 0 | 0 |
| 9 | Varietal demonstration | Barnyard millet | Low productivity | - | Demonstration of DHB-93-02 variety | 2 | 0 | 0 | 5 | 0.40 | 0 | 0 | 0 | 0 |
| 10 | ICM | Greengram | Low productivity of local variety (Shining moong) | - | Demonstration of DGGV-2 variety | 4 | 0 | 0 | 10 | 4.23 | 0 | 0 | 0 | 0 |
| 11 | ICM | Mango | Imbalanced nutrition, Incidence of Mango hopper and powdery mildew | - | IPDM in Mango | 1 | 2 | 0 | 25 | 0 | 522 | 0 | 0 | 0 |
| 12 | Varietal Assessment | Onion | Low productivity in local varieties Bellary Red & Arka Kalyan | Assessment of Onion variety Bheema Super for higher productivity | - | 2 | 0 | 0 | 6 | 0.10 | 0 | 0 | 0 | 0 |
| 13 | ICM | Onion | Low productivity and low keeping quality of bulbs in local varieties | **-** | Demonstration of Arka Kalyan variety | 2 | 0 | 0 | 18 | 8.77 | 0 | 0 | 0 | 0 |
| 14 | ICM | White Onion | Imbalanced nutrition and no timely management of pest and diseases | **-** | IPDM in White Onion | 2 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 |
| 15 | ICM | Ashwagandha | No crop diversification | - | ICM in Ashwagandha | 1 | 0 | 0 | 05 | 0.40 | 0 | 0 | 0 | 0 |
| 16 | Dryland horticulture | Mango and Cashew | No crop diversification | - | Agri-Horticulture system under dryland (Red Soils) condition | 3 | 0 | 0 | 15 | 0 | Mango grafts-375  Cashew grafts – 375 | 0 | 0 | 0 |
| 17 | Health and Nutrition | Nutrition Garden | Lack of awareness about Nutrition & Nutrition Garden | - | Demonstration of Nutri-Farms | 9 | 3 | 13 | 12 | 0.05 | 80 | 0 | 0 | 0 |
| 18 | Health & Drudgery | Functional Clothing Kit | Health problems due to inhalation of dust particles during threshing and winnowing | - | Demonstration of Functional Clothing Kit during Maize/ Sorghum harvesting/ threshing | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 19 | Post Harvest Technology | Spiral Separator | Lack of awareness on cleaning and grading of grains which fetches low price for the produce | - | Demonstration of Spiral Separator for Bengalgram, Redgram & Sorghum grains | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 20 | Nutrition Management in dairy animals | Fodder and Azolla | Low productivity of milk in CB cow due to Non-cultivation of perennial fodder and grass species | - | Demonstration of Fodder Cafeteria and Azolla Production | 4 | 4 | 0 | 1 | * Lucerne: 1 Kg * Hedge Lucerne: 1.0 Kg * Stylo santhes hemata:   0.6 Kg   * Azolla culture: 10 Kg | * Hybrid Napier-6 slips : 4366 Nos. * Perennial sorghum seeds of COF531 variety: 2.0 Kg * Grazing guinea grass slips:   8720   * Rhodes grass slips : 14520 * Signal grass : 14520 | 0 | 0 | 0 |
| 21 | Nutrition Management in dairy animals | Silage production | Low productivity of milk in CB Cow due to Non availability of green fodder throughout the year | - | Demonstration of silage production | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 22 | Nutrition Management in dairy animals | Hydroponic Fodder Production | Low productivity of milk in CB Cow due to Non availability of green fodder throughout the year | - | Introduction of Hydroponic Fodder Production | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 23 | Soil health and fertility | Soil reclamation | Low productivity of crops due to alkalinity problem | - | Demonstration on soil reclamation | 3 | 0 | 0 | 2 | 2.0 | 0 | 0 | 0 | 0 |

**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 | Demonstration of DGGV-2 variety | UAS, Dharwad | Greengram | 0 | 5 | 4 | 20 |
| 2 | Demonstration of JAKI-9218 variety | UAS, Dharwad | Bengalgram | 0 | 5 | 6 | 28 |
| 3 | Cropping systems | UAS, Dharwad | Maize + Redgram intercropping system | 0 | 10 | 2 | 5 |
| 4 | Assessment of Bt.Cotton + Greengram (1:2) intercropping system | UAS, Dharwad | Bt.Cotton + Greengram | 5 | 0 | 3 | 12 |
| 5 | IPDM in Bt. Cotton | UAS, Dharwad | Bt. Cotton | 0 | 10 | 4 | 15 |
| 6 | Varietal assessment of BGD-111-01 & NBEG-3 varieties | ANGARU, Hyderabad &  UAS, Raichur | Bengalgram | 5 | 0 | 3 | 6 |
| 7 | Varietal assessment | UAS, Dharwad | Rabi Sorghum | 0 | 20 | 4 | 15 |
| 8 | Varietal demonstration | UAS, Dharwad | Foxtail millet | 0 | 10 | 2 | 8 |
| 9 | Varietal demonstration | UAS, Dharwad | Barnyard millet | 0 | 10 | 2 | 6 |
| 10 | IPDM in Mango | UHS, Bagalkot | Mango | 0 | 4 | 3 | 25 |
| 11 | Assessment of management practices for thrips in Onion crop | ICAR-DOGR, Pune | Onion | 5 | 0 | 2 | 10 |
| 12 | Varietal Assessment of Onion variety Bheema Super | ICAR-DOGR, Pune | Onion | 5 | - | 2 | 6 |
| 13 | Demonstration of Arka Kalyan variety of Onion | ICAR-IIHR, Bengaluru | Onion | 0 | 25 | 2 | 18 |
| 14 | IPDM in White Onion | UHS, Bagalkot | Onion | 0 | 5 | 2 | 10 |
| 15 | ICM in Ashwagandha variety Arka Ashwagandha | UHS, Bagalkot | Ashwagandha | 0 | 10 | 1 | 05 |
| 16 | Agri-Horti system under dryland (Red Soils) condition | UHS, Bagalkot | Mango & Cashew | 0 | 15 | 3 | 15 |
| 17 | Nutri farms | UAS, Bangalore | Nutrition Garden | - | 10 | 14 | 6 |
| 18 | Functional Clothing Kit for threshing and winnowing of Maize | UAS, Dharwad | Health & Drudgery | - | - | 2 | 2 |
| 19 | Post Harvest Technology | Padson Industries,  Akola, Maharashtra | Primary processing, packing & labeling | - | - | 3 | 2 |
| 20 | Value addition in millets | UAS, Dharwad | Value addition | - | - | 8 | 4 |
| 21 | Soil reclamation | UAS, Dharwad | Rabi Sorghum | 0 | 5 | 2 | 6 |

**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** |
| 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 110 | 5 | 8 | 0 | 125 | 10 | 8 | 0 |
| 2 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 128 | 10 | 13 | 2 | 85 | 65 | 12 | 8 |
| 3 | 0 | 0 | 0 | 0 | 8 | 0 | 2 | 0 | 43 | 0 | 7 | 0 | 26 | 0 | 4 | 0 |
| 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 5 | 5 | 0 | 60 | 10 | 5 | 0 |
| 5 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 105 | 15 | 6 | 0 | 48 | 5 | 3 | 0 |
| 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 5 | 6 | 0 | 35 | 4 | 5 | 2 |
| 7 | 0 | 0 | 0 | 0 | 15 | 2 | 3 | 0 | 68 | 8 | 8 | 0 | 22 | 5 | 8 | 0 |
| 8 | 0 | 0 | 0 | 0 | 8 | 0 | 2 | 0 | 36 | 3 | 2 | 0 | 35 | 0 | 4 | 0 |
| 9 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 33 | 2 | 2 | 0 | 22 | 0 | 2 | 0 |
| 10 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 42 | 0 | 2 | 0 | 68 | 6 | 2 | 0 |
| 11 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 5 | 7 | 0 | 25 | 4 | 3 | 0 |
| 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 13 | 9 | 3 | 10 | 0 | 2 | 0 |
| 13 | 0 | 0 | 0 | 0 | 21 | 2 | 2 | 0 | 27 | 3 | 6 | 0 | 15 | 3 | 0 | 0 |
| 14 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 40 | 3 | 5 | 0 | 15 | 3 | 5 | 1 |
| 15 | 0 | 0 | 0 | 0 | 8 | 2 | 0 | 0 | 11 | 1 | 0 | 0 | 10 | 3 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 | 3 | 0 | 12 | 0 | 84 | 8 | 50 | 0 | 20 | 5 | 8 | 2 |
| 17 | 0 | 0 | 0 | 0 | 3 | 7 | 0 | 0 | 61 | 314 | 31 | 62 | 18 | 15 | 5 | 20 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 4 | 20 | 4 | 12 | 6 | 10 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 6 | 2 | 2 | 6 | 4 | 8 | 6 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 193 | 16 | 27 | 35 | 56 | 15 | 22 |
| 21 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 41 | 0 | 9 | 0 | 26 | 2 | 2 | 0 |

**PART IV - On Farm Trial**

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

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

**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 |  |  |  |  |  |
|  |  |  |  |  |
| Varietal Evaluation | Onion | Assessment of Onion variety Bheema Super for higher productivity | 5 | 5 | 1.2 ha / trial (Total : 6 ha) |
| Bengalgram | Assessment of potential productivity of NBEG-3 & BGD-111-01 varieties under irrigated condition | 5 | 5 | 1.2 ha / trial (Total : 6 ha) |
| Integrated Pest Management | Onion | Assessment of thrips management practices in Onion crop | 5 | 5 | 1.2 ha / trial (Total : 6 ha) |
| Integrated Crop Management | Bt.Cotton + Greengram | Assessment of Bt.Cotton + Greengram (1:2) intercropping system | 5 | 5 | 1.2 ha / trial (Total : 6 ha) |
| 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** |  |  | **20** | **20** |  |

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

**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 pods/plant)** | **Net Return Rs. / unit** | **BC Ratio** | **Remarks if any** |
| **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 & NBEG-3  varieties for higher productivity | 5 | **T.O.1 (Farmers’ practice)**  Cultivation of JG-11 variety | - | 11.95 | Qtl/ha | 55.5 | 28097 | 2.08 | - |
| **T.O.2**  Cultivation of JAKI-9218 variety | UAS, Dharwad | 13.57 | Qtl/ha | 61.02 | 35038 | 2.33 | - |
| **T.O.3**  Assessment of BGD-111-01 variety | IARI-RRC, Dharwad | 16.52 | Qtl/ha | 68.02 | 47521 | 2.75 | - |
| **T.O.4**  Assessment of NBEG-3 variety | ANGRAU, Hyderabad | 15.30 | Qtl/ha | 63.5 | 42225 | 2.57 |  |

4.C2. 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 & NBEG-3 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 | 11.95 | 28097 | 2.08 | - | 55.5 |
| **Recommended practice:** Cultivation of JAKI-9218 variety | 13.57 | 35038 | 2.33 | 13.56 | 61.02 |
| **Alternate practice-1:** Assessment of BGD-111-01 variety | 16.52 | 47521 | 2.75 | 38.27 | 68.02 |
| **Alternate practice-1:** Assessment of NBEG-3 variety | 15.30 | 42225 | 2.57 | 28.03 | 63.50 |

3.**Specific Feedback from farmers:** BGD-111-01 & NBEG-3 varieties are high yielding compared to JAKI-9218 variety

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

OFT farmers in higher quantity

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

**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** | **Net Return Rs. / Ha** | **BC Ratio** | **Remarks if any** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **11** | **12** | **13** |
| Bt.Cotton + Greengram | Rainfed | Low income due to sole crop of Bt.Cotton | Assessment of Bt.Cotton + Greengram (1:2) intercropping system | 5 | **T.O.1 (Farmer practice)**  Bt.Cotton as sole crop | - | 15.59 | Qtl/ha | 33447.8 | 1.69 | - |
| **T.O.2**  Recommended practice: Bt.Cotton + Greengram (1:1) intercropping system | UAS, Dharwad | Bt.Cotton:14.80  Greengram:2.71 | Qtl/ha | 39160 | 1.73 | 17.64 Qtl/ha : crop equivalent yield of Bt.Cotton |
| **T.O.3**  Bt.Cotton + Greengram (1:2) intercropping system | UAS, Dharwad | Bt.Cotton:14.51  Greengram:4.44 | Qtl/ha | 46958 | 1.87 | 19.16 Qtl/ha : crop equivalent yield of Bt.Cotton |

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed :** Assessment of Bt.Cotton + Greengram (1:2) intercropping system

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

|  | **Performance indicators** | | | |
| --- | --- | --- | --- | --- |
| **Grain yield (Qtl/ha)** | **Net Returns (Rs./ha)** | **B.C. Ratio** | **% of increase in income** |
| Farmers’ practice:  Bt.Cotton as sole crop | 15.59 | 33448 | 1.69 | - |
| Recommended practice:  Bt.Cotton + Greengram (1:1) intercropping system | Bt.Cotton:14.80  Greengram:2.71 | 39160 | 1.73 | 13.14 |
| Alternate practice-1:  Bt.Cotton + Greengram (1:2) intercropping system (Plant Population more) | Bt.Cotton:14.51  Greengram:4.44 | 46958 | 1.87 | 22.91 |

1. **Specific Feedback from farmers** : In Bt.Cotton + Greengram (1:2) trial, the Greengram crop yield was more compared to R.P (Bt.Cotton + Greengram 1:1)
2. **Specific Feedback from Extension personnel and other stakeholders :** -

**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)** | **\* Net Return Rs. / unit** | **BC Ratio** | **Remarks if any** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| Onion | Rainfed | Low productivity in local variety Bellary Red and Arka Kalyan | Assessment of Onion variety Bheema Super for higher productivity | 5 | **T.O.1 (Farmer practice)**  Cultivation of Bellary Red variety | - | 25.29 | Qtl/ha | 91.24 | 6560 | 1.28 | - |
| **T.O.2**  Assessment of Arka Kalyan variety | ICAR-IIHR, Bengaluru & UHS, Bagalkot | 30.54 | Qtl/ha | 110.28 | 10263 | 1.39 | - |
| **T.O.3**  Assessment of Bheema Super variety | ICAR-DOGR, Pune | 31.74 | Qtl/ha | 115.68 | 11579 | 1.44 | - |

**\* Net returns are very low due to crash in Onion prices during the harvesting period.**

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed :** Assessment of Onion variety Bheema Super for higher productivity

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technology Assessed** | **Performance indicators** | | | |
| **Yield (Qtl/ha)** | **Net Returns (Rs./ha)** | **B.C. Ratio** | **% increase in yield** |
| **Farmer’s practice:**  Cultivation of Bellary Red variety | 25.29 | 6560 | 1.28 | - |
| **Recommended practice:**  Assessment of Arka Kalyan variety | 30.54 | 10263 | 1.39 | 20.75 |
| **Alternate practice:**  Assessment of Bheema Super variety | 31.74 | 11579 | 1.44 | 25.50 |

3. **Specific Feedback from farmers** : Farmers accepted Bheema Super variety for its good bulb yield

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

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

**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 thrips/plant)** | **Observations other than yield**  **(% of purple blotch)** | **Net Return Rs. / unit** | **BC Ratio** | **Remarks if any** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |  | **11** | **12** | **13** |
| Onion | Protective irrigation | Thrips infestation reducing the yield | Assessment of management practices for thrips in Onion crop | 5 | **T.O.1 (Farmer practice)**  Spray of Lambda Cyhalothrin @ 2 ml/L | - | 105.3 | Qtl/ha | 1.24 | 10.84 | 45230 | 2.16 | - |
| **T.O.2**  Spray of Lecancillium lecanii @ 2 gm/L | UAS, Dharwad | 120.6 | Qtl/ha | 0.72 | 9 | 57240 | 2.46 | - |
| **T.O.3**  Spray of Lecancillium lecanii @ 2 gm/L + Soluble Boron @ 1 gm/L | ICAR-DOGR, Pune | 143.4 | Qtl/ha | 0.4 | 7.8 | 75320 | 2.91 | - |

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed :** Assessment of management practices for thrips in Onion crop

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

|  | **Performance indicators** | | | | |
| --- | --- | --- | --- | --- | --- |
| **Grain yield (Qtl/ha)** | **Net Returns (Rs./ha)** | **B.C. Ratio** | **No. of thrips/plant** | **(% of purple blotch** |
| Farmers’ practice: Spray of Lambda Cyhalothrin @ 2 ml/L | 105.3 | 45230 | 2.16 | 1.24 | 10.84 |
| Recommended practice: Spray of Lecancillium lecanii @ 2 gm/L | 120.6 | 57240 | 2.46 | 0.72 | 9 |
| Alternate practice-1:  Spray of Lecancillium lecanii @ 2 gm/L + Soluble Boron @ 1 gm/L | 143.4 | 75320 | 2.91 | 0.4 | 7.8 |

3. **Specific Feedback from farmers** : **Quality of bulb and yield increased and got more market price**

4. **Specific Feedback from Extension personnel and other stakeholders :** In Alternate practice, plot, multiplication of thrips was drastically reduced. Hence, the incidence of purple blotch was also reduced.

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

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

**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.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

**PART V - FRONTLINE DEMONSTRATIONS (2018-19)**

1. **A. Summary of FLDs implemented**

| **Sl.**  **No.** | **Category** | **Farming**  **Situation** | **Season** | **Crop** | **Variety/ breed** | **Hybrid** | **Thematic area** | **Technology Demonstrated** | **Area (ha)** | | **Farmers (No.)** | | **Farmers (No.)** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Proposed** | **Actual** | **SC/ ST** | **Others** | **Small/ Marginal** | **Others** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Pulses | Rainfed | Kharif | Greengram | DGGV-2 | - | Varietal demonstration | Demonstration of DGGV-2 variety | 2 | 2 | 0 | 5 | 2 | 3 |
| 2 | Pulses | Protective irrigation | Rabi | Bengalgram | JAKI-9218 | - | Varietal demonstration | Demonstration of JAKI-9218 variety | 2 | 2 | 0 | 5 | 0 | 5 |
| 3 | Cereals | Rainfed | Rabi | Rabi Sorghum | SPV- 2217 | - | Varietal demonstration | Demonstration of SPV-2217 | 8 | 8 | 3 | 17 | 8 | 12 |
| 4 |  | Rainfed | Kharif | Maize+ Redgram | Redgram:  TS-3R | Maize:  Kaveri 555 | Intercropping systems | Demonstration of Maize+Redgram intercropping system | 4 | 4 | 2 | 8 | 4 | 6 |
| 5 | Millets | Rainfed | Kharif | Foxtail millet | DHFt 109-3 | - | Varietal demonstration | Demonstration of DHFt-109-3 variety | 4 | 4 | 3 | 7 | 7 | 3 |
| 6 | Millets | Rainfed | Kharif | Barnyard millet | DHB 93-2 | - | Varietal demonstration | Demonstration of DHB 93-2 variety | 4 | 4 | 0 | 10 | 6 | 4 |
| 7 | Vegetables | Rainfed | Kharif | Onion | Arka Kalyan | - | Varietal demonstration | Demonstration of Arka Kalyan variety | 10 | 10 | 2 | 23 | 8 | 17 |
| 8 | Vegetables | Irrigated | Rabi | White Onion | Telagi White | - | IPDM | Demonstration of IPDM in White Onion | 2 | 2 | 0 | 5 | 2 | 3 |
|  | Flowers |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Fruit | Rainfed | Perennial | Mango & Cashew | Alphonso & Vengurla-4 | - | Dryland horticulture | Demonstration of Mango with Cashew orchards under drylands | 6 | 6 | 12 | 3 | 12 | 3 |
| 10 | Fruit | Rainfed | Kharif | Mango | Alphonso | - | IPDM | IPDM in Mango | 1.6 | 1.6 | - | 4 | 2 | 2 |
|  | Spices and condiments |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Bt. Cotton | Rainfed | Kharif | Bt. Cotton |  | Kanaka  Niraj | IPDM | IPDM in Bt. Cotton | 4 | 4 | 0 | 10 | 4 | 6 |
| 12 | Medicinal and aromatic | Rainfed | Rabi | Ashwa- gandha | Arka Ashwagandha | - | ICM | ICM in Arka Ashwagandha variety | 4 | 4 | 0 | 10 | 6 | 4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Fodder | Irrigated | Kharif | Perennial Fodder crops | * Hybrid Napier –DHN6 * Guinea Grass * Rhodes Grass * Signal Grass * Lucerne * Azolla Culture | - | Nutrition Management in dairy animals | Demonstration on Fodder Cafeteria and Azolla Production | 10 no. | 10 no. | 1 | 9 | 10 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Plantation |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Dairy | Dryland/  Irrigated | Rabi | CB Cow | - | - | Nutrition Management in dairy animals | Demonstration of silage production | 10 no. | 10 no. | 1 | 9 | 10 | 0 |
| 15 | Dairy | Dryland | Rabi | CB Cow | - | - | Nutrition Management in dairy animals | Introduction of Hydroponic Fodder Production | 5 Nos. | 5 Nos. | 0 | 5 | 5 | 0 |
|  | Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Piggery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Common carps |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mussels |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental fishes |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Implements |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Others (specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

| **Sl.**  **No.** | **Category** | **Farming**  **Situation** | **Season**  **and**  **Year** | **Crop** | **Variety/ breed** | **Hybrid** | **Thematic area** | **Technology Demonstrated** | **Season and year** | **Status of soil** | | | **Previous crop grown** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **N** | **P** | **K** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Pulses | Rainfed | Kharif 2018 | Greengram | DGGV-2 | - | Varietal demonstration | Demonstration of DGGV-2 variety | Kharif 2018 | L | L | H | Rabi Sorghum & Bt. Cotton |
|  |  | Protective irrigation | Rabi 2018-19 | Bengalgram | JAKI-9218 | - | Varietal demonstration | Demonstration of JAKI-9218 variety | Rabi 2018-19 | L | M | H | Maize & fallow land |
| 3 | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Cereals | Rainfed | Rabi 2017-18 | Rabi Sorghum | SPV-2217 | - | Varietal demonstration | Demonstration of SPV-2217 variety | Rabi  2018-19 | L | L | H | Greengram & fallow land |
|  |  | Rainfed | Kharif 2018-19 | Maize+ Redgram | Redgram:  TS-3R | Maize:  Kaveri-555 | Intercropping system | Demonstration of Maize+Redgram intercropping system | Kharif 2018-19 | L | L | M | Maize |
| 5 | Millets | Rainfed | Kharif 2018 | Foxtail millet | DHFt-109-3 | - | Varietal demonstration | Demonstration of DHFt-109-3 | Kharif 2018 | L | L | M | Spreading Groundnut & Rabi Sorghum |
|  | Millets | Rainfed | Kharif 2018 | Barnyardmillet | DHB-93-2 | - | Varietal demonstration | Demonstration of DHB-93-2 variety | Kharif 2018 | L | L | M | Sp. Groundnut & Rabi Sorghum |
| 6 | Vegetables | Rainfed | Kharif  2018 | Onion | Arka Kalyan | - | Varietal demonstration | Demonstration of Arka Kalyan variety | Kharif  2018-19 | L | L | H | Rabi Sorghum |
|  | Vegetables | Irrigated | Rabi  2018 | White Onion | Telagi White | - | IPDM | IPDM in white onion variety | Rabi  2018-19 | L | L | M | Maize |
|  | Flowers |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Fruit | Rainfed | Perennial | Mango | Alphonso & Vengurla-4 | - | Dryland horticulture | Demonstration of Agri-Horticulture system under (Red soils) drylands | Perennial | L | L | L | - |
| 8 | Fruit | Rainfed | Kharif, Rabi & Summer 2018-19 | Mango | Alphonso | - | IPDM | IPDM in Mango | Kharif 2018-19 | L | M | L | - |
|  | Spices and condiments |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Commercial | Rainfed | Kharif 2018-19 | Bt. Cotton |  | Kanaka Niraj | IPDM | IPDM in Bt. Cotton | Kharif 2018-19 | L | L | M | Chilli & Sorghum |
| 11 | Medicinal and aromatic | Rainfed | Rabi  2018-19 | Ashwaga-ndha | Arla Ashwagandha | - | ICM | Demonstration of Ashwagandha | Rabi  2018-19 | L | L | H | Greengram |
| 12 | Fodder | Irrigated | Kharif & 2018-19 | Perennial Fodder crops | * Hybrid Napier –DHN6 * Guinea Grass * Rhodes Grass * Signal Grass * Lucerne * Azolla Culture | - | Nutrition Management in dairy animals | Demonstration on Fodder Cafeteria and Azolla Production | Kharif & 2018-19 | L | L | M | Maize |
| 13 | Plantation |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |

**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**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** |
|  |  |  |  |  |  |  | **H** | **L** | **A** |  |  |  |  |  |  |  |  |  |  |
| **Oilseeds** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Pulses** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Greengram | Demonstration of DGGV-2 variety | DGGV-2 | - | Rainfed | 5 | 2 | 10.37 | 7.25 | 8.37 | 6.71 | 24.74 | 28000 | 46894 | 18894 | 1.67 | 26698 | 37576 | 10878 | 1.41 |
| Bengalgram | Demonstration of JAKI-9218 variety | JAKI-9218 | - | Protective irrigation | 5 | 2 | 25.0 | 16.25 | 20.75 | 17.20 | 20.64 | 31354 | 93375 | 62021 | 2.96 | 28718 | 77400 | 48682 | 2.68 |
| **Cereals** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rabi Sorghum | Demonstration of SPV-2217 variety | SPV-2217 | - | Rainfed | 20 | 8 | 11.25 | 3.50 | 6.55 | 5.11 | 28.18 | 16200 | 23340 | 7140 | 1.44 | 15184 | 19308 | 4124 | 1.27 |
| Maize+ Redgram | Demonstration of Maize+ Redgram intercropping system | Redgram:  TS-3R | Maize: CP-848 | Rainfed | 10 | 4 | 35.0  Crop Equivalent Yield of Maize  (Maize: 20.00  Red-gram:  5.0) | 29.5  Crop Equivalent Yield of Maize  (Maize: 17.0  +Red-gram:  4.25) | 32.52  Crop Equivalent Yield of Maize  (Maize: 18.27  +Red-gram:  4.75) | 22.17  (Sole crop Maize yield) | 46.68 | 29538 | 45535 | 15997 | 1.54 | 22906 | 31045 | 8139 | 1.35 |
| **Millets** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foxtail  Millet | Demonstration of DHFt-109-3 variety | DHFt-109-3 | - | Rainfed | 10 | 4 | 9.5 | 6.75 | 8.41 | 7.12 | 18.12 | 14699 | 16830 | 2151 | 1.15 | 13432 | 14250 | 818 | 1.06 |
| Barnyard millet | Demonstration of DHB-93-2 variety | DHB 93-2 | - | Rainfed | 10 | 4 | 9.37 | 7.50 | 8.21 | 6.51 | 26.11 | 16375 | 20531 | 4156 | 1.25 | 15429 | 16280 | 851 | 1.06 |
| **Vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Onion | Demonstration of Arka Kalyan variety in Onion | Arka Kalyan | - | Rainfed | 25 | 10 | 28.87 | 19.93 | 24.41 | 20.09 | 21.50 | 23192 | 29295 | 6103 | 1.26 | 21728 | 24113 | 2385 | 1.11 |
| Onion | IPDM in White Onion | Thelagi White | - | Irrigated | 5 | 2 | 132 | 117.56 | 124.44 | 105.33 | 18.15 | 39532 | 110749 | 71217 | 2.80 | 38659 | 93739 | 55080 | 2.42 |
| **Flowers** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Orna**  **mental** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fruit** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mango & Cashew | Demonstration of Agri-horticulture system | Alphonso & Vengurla-4 | - | Rainfed | 15 | 6 | Crops are one year old & Survival rate is 75.33% | | | | | | | | | | | | |
|  | IPDM in Mango | Alphonso | - | Rainfed | 4 | 1.6 | 27.5 | 20.0 | 25.0 | 18.2 | 37.36 | 47573 | 150150 | 102577 | 3.15 | 41328 | 108900 | 67572 | 2.64 |
| **Spices and condiments** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commer  cial | IPDM in Bt. Cotton | - | Kanaka & Niraja | Rainfed | 10 | 4 | 16.25 | 10.62 | 13.74 | 11.23 | 22.35 | 28000 | 46894 | 18894 | 1.67 | 26698 | 37576 | 10877 | 1.41 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibre crops like cotton |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Medicinal and aromatic** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \*Ashwagan  Dha | ICM in Ashwagandha | Arka Ashwagandha | - | Rainfed | 10 | 4 | Crop vitiated due to moisture stress | | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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** |
| No. of pods / plant | 25.06 | 20.78 |
| Incidence of pod borer (Nos./plant) | 0.32 | 0.96 |

1. **Data on additional parameters other than yield : Demonstration of JAKI-9218 variety in Bengalgram**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Wilt incidence (Percentage) | 0.20 | 0.88 |
| No. of pod borers (Nos./Sq. mtr area) | 0.16 | 0.64 |

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 | 9.84 | 23.77 |

1. **Data on additional parameters other than yield : Demonstration of DHFt 109-3 variety in Foxtail millet**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Height of the plant (Cms) | 108.52 | 87.66 |
| Length of earhead (Cms) | 16.27 | 13.59 |

1. **Data on additional parameters other than yield : IPDM in White Onion**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Bulb weight (gms) | 115.16 | 100.38 |

1. **Data on additional parameters other than yield : IPDM in Mango**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration plot** | **Local check plot** |
| Mango Hopper (No./ [inflorescence](https://www.google.com/search?client=firefox-b-ab&q=inflorescence&spell=1&sa=X&ved=0ahUKEwjy6fSQ1qDbAhUFLI8KHTyzBFkQkeECCCUoAA) ) | 0.20 | 1.00 |
| % of Powdery Mildew | 4.38 % | 12.5 % |

5.B.2. 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 Cafeteria and Azolla Production | CB Cows | 10 | 10 | 11.00 | 5.60 | 7.34 | 6.20 | 17.74 | 22690 | 55490 | 32800 | 2.44 | 28647 | 46872 | 18225 | 1.61 |
| Demonstration of silage production & usage for enhancing milk yield | CB Cows | 10 | 10 | 9.00 | 3.50 | 7.30 | 6.35 | 15.83 | 23890 | 55188 | 31298 | 2.31 | 28930 | 48006 | 19076 | 1.65 |
| Demonstration of Hydroponic Fodder Production & usage for enhancing milk yield | CB Cows | 05 | 05 | 9.10 | 5.60 | 7.78 | 7.00 | 10.00 | 25980 | 58816 | 32836 | 2.26 | 30915 | 52920 | 22005 | 1.71 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 and Azolla production**

Salient features of Perennial Grasses as perceived by Farmers involved in Demonstrations

|  | Palatability of grass / fodder | Soil erosion controlling character | Regenerating capacity of grass / fodder | Suitability to grow on the farm bunds | Average Bio-mass / 100 sq.ft. at 1st harvested stage | Average No. of tillers at 1st harvesting stage | Average height of the grass at 1st harvesting stage |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Hybrid Napier DHN-6 | 75-85%  (Very good) | Yes | Yes | Yes | 28 Kg | 44.0 | 5.6 ft. |
| Guinea grass | 90-100%  (Excellent) | Yes | Yes | Yes | 19 Kg | 51.0 | 1.6 ft. |
| Rhodes grass | 90-100%  (Excellent) | Yes | Yes | Yes | 1.5 Kg | 64.0 | 3.8 ft. |
| Signal grass | 75-85%  (Excellent) | Yes | Yes | Yes | 4.0 Kg | 51.0 | 2.4 ft. |
| Lucerne | 90-100%  (Excellent) | Yes | Yes | Yes | 4.0 Kg | 6.0 | 1.9 ft. |

**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 Cafeteria and Azolla culture

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demonstration** | **Check** |
| Feeding of Fodder and Azolla culture | * Gradual improvement in the general condition of the animal health * Increase in intake of dry fodder * Cows are coming to heat within the period | - |
| Salient features of Azolla production | * Average production of Azolla in 12'x4' area was around 0.25 Kg/day | - |
| Nutrition | Proper nutrition | No systematic nutrition |

Data on additional parameters : Introduction of Hydroponic Fodder Production

| **Data on other parameters in relation to technology demonstrated** | | |
| --- | --- | --- |
| **Parameter with unit** | **Demonstration** | **Check** |
| Water consumption | Low consumption of water. Ideal for drought areas | - |
| Fertiliser requirement | No fertiliser required | - |
| Nutrition | High nutrition and good hydration | - |

Data on additional parameters : Demonstration of silage production

| **Data on other parameters in relation to technology demonstrated** | | |
| --- | --- | --- |
| **Parameter with unit** | **Demonstration** | **Check** |
| Supply of fodder | * Possible for regular supply of silage green fodder to the animals. * Ensuring the silaged green fodder especially during lean period | - |
| Weather | Silage can be made under all weather conditions | - |

5.B.3. 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.B.4. Other enterprises

| **Enterprise** | **Name of the technology demonstrated** | **Variety/ species** | **No. of Demo** | **Units/ Area {m2}** | **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**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** | **Gross**  **Cost** | **Gross**  **Return** | **Net Return** | **\*\***  **BCR** |
|  |  |  |  |  | H | L | A |  |  |  |  |  |  |  |  |  |  |
| Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sericulture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others  (pl. specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | Reclamation of problematic soil (Rabi Sorghum crop) | SPV-2217 | 5 | 2 | 7.00 | 6.25 | 6.60 | 4.90 | 34.69 | 15347 | 23480 | 8133 | 1.52 | 14847 | 18720 | 4073 | 1.25 |
| Nutri farms | Nutri farms | - | 10 | - | - | - | - | - | - | 30000 | 35130 | 5130 | 1.17 | 0 | 0 | 0 | 0 |

\*\* BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

**Data on additional parameters other than yield : Nutri farms**

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demo** | **Local** |
| Amount spent towards purchase of vegetables / year | Rs. 2400 (@ Rs.200/month) | Rs.9600/- (Rs.800/- per month) |
| Consumption of leafy vegetables / week | 4-5 days / week | 1-2 days / week |

**5.B.5. 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 | Gross cost | Gross  Return | Net Return | \*\*  BCR | Gross  Cost | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

\*\* BCR= GROSS RETURN/GROSS COST

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

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Activity** | **No. of activities organised** | **Number of participants** | **Remarks** |
| 1 | Field days | 7 | 666 | - |
| 2 | Farmers Training | 17 | 433 | - |
| 3 | Media coverage | 10 | - | - |
| 4 | Training for extension functionaries | 2 | 64 | - |
| 5 | Others (Please specify)-Farm Advisory Services | 360 | 472 | - |

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS (2018-19)**

**Demonstration details on crop hybrids**

| **Type of Breed** | **Name of the technology demonstrated** | **Name of the hybrid** | **No. of Demo** | **Area (ha)** | **Yield (q/ha)** | | | | **% Increase** | **\*Economics of demonstration (Rs./ha)** | | | | **\*Economics of check**  **(Rs./ha)** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Demo** | | | **Check** | **Gross**  **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 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maize (Fodder) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sorghum (Fodder) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

H-High L-Low, A-Average

**PART VII. TRAINING (2018-19)**

**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 | 6 | 108 | 128 | 236 | 31 | 3 | 34 | 139 | 131 | 270 |
| Crop Diversification | 4 | 111 | 0 | 111 | 68 | 0 | 68 | 179 | 0 | 179 |
| Integrated Farming |  |  |  |  |  |  |  |  |  |  |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 11 | 259 | 11 | 270 | 47 | 5 | 52 | 306 | 16 | 322 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Production and management technology | 4 | 122 | 6 | 128 | 15 | 0 | 15 | 137 | 6 | 143 |
| **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 Onion crop | 1 | 17 | 0 | 17 | 1 | 0 | 1 | 18 | 0 | 18 |
| Commercial production of vegetables | 2 | 154 | 57 | 211 | 0 | 0 | 0 | 154 | 57 | 211 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 2 | 37 | 0 | 37 | 0 | 0 | 0 | 37 | 0 | 37 |
| Management of young plants/orchards | 1 | 16 | 0 | 16 | 0 | 0 | 0 | 16 | 0 | 16 |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition | 1 | 15 | 0 | 15 | 2 | 0 | 2 | 17 | 0 | 17 |
| **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 | 47 | 1 | 48 | 10 | 6 | 16 | 57 | 7 | 64 |
| 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 | 1 | 11 | 1 | 12 | 0 | 0 | 0 | 11 | 1 | 12 |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | 13 | 454 | 68 | 522 | 128 | 19 | 147 | 582 | 87 | 669 |
| Integrated water management | 20 | 633 | 239 | 872 | 103 | 71 | 174 | 736 | 310 | 1046 |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops |  |  |  |  |  |  |  |  |  |  |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 9 | 10 | 188 | 198 | 0 | 58 | 58 | 10 | 246 | 256 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management | 1 | 0 | 0 | 0 | 0 | 34 | 34 | 0 | 34 | 34 |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening |  |  |  |  |  |  |  |  |  |  |
| Design and development of low/minimum cost diet |  |  |  |  |  |  |  |  |  |  |
| Designing and development for high nutrient efficiency diet |  |  |  |  |  |  |  |  |  |  |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking | 1 | 8 | 10 | 18 | 3 | 8 | 11 | 11 | 18 | 29 |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques | 1 | 50 | 0 | 50 | 0 | 0 | 0 | 50 | 0 | 50 |
| Value addition | 3 | 57 | 31 | 88 | 13 | 9 | 22 | 70 | 40 | 110 |
| Women empowerment | 3 | 17 | 76 | 93 | 3 | 23 | 26 | 20 | 99 | 119 |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Income generating activities |  |  |  |  |  |  |  |  |  |  |
| Household nutritional security | 4 | 40 | 166 | 206 | 14 | 22 | 36 | 54 | 188 | 242 |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance | 1 | 14 | 4 | 18 | 4 | 27 | 31 | 18 | 31 | 49 |
| Installation and maintenance of micro irrigation systems |  |  |  |  |  |  |  |  |  |  |
| Use of Plastics in farming practices |  |  |  |  |  |  |  |  |  |  |
| Production of small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Small scale processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 2 | 56 | 0 | 56 | 8 | 0 | 8 | 64 | 0 | 64 |
| Integrated Disease Management | 1 | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Organic farming | 6 | 138 | 22 | 160 | 20 | 33 | 53 | 158 | 55 | 213 |
| **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 | 1 | 25 | 0 | 25 | 3 | 0 | 3 | 28 | 0 | 28 |
| Production of fry and fingerlings |  |  |  |  |  |  |  |  |  |  |
| Production of Bee-colonies and wax sheets | 1 | 20 | 0 | 20 | 3 | 0 | 3 | 23 | 0 | 23 |
| 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 | 1 | 24 | 0 | 24 | 6 | 0 | 6 | 30 | 0 | 30 |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Mobilization of social capital |  |  |  |  |  |  |  |  |  |  |
| Entrepreneurial development of farmers/youths | 1 | 8 | 2 | 10 | 0 | 0 | 0 | 8 | 2 | 10 |
| Others (pl. specify) |  |  |  |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization | 1 | 35 | 2 | 37 | 9 | 2 | 11 | 44 | 4 | 48 |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems |  |  |  |  |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **104** | **2502** | **1012** | **3514** | **495** | **320** | **815** | **2997** | **1332** | **4298** |

**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 | 14 | 365 | 34 | 399 | 65 | 5 | 70 | 430 | 39 | 469 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 5 | 124 | 0 | 124 | 23 | 3 | 26 | 147 | 3 | 150 |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology | 9 | 210 | 9 | 219 | 82 | 0 | 82 | 292 | 9 | 301 |
| **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) |  |  |  |  |  |  |  |  |  |  |
| Cultivation of vegetables through organic farming | 1 | 3 | 52 | 55 | 0 | 4 | 4 | 3 | 56 | 59 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 7 | 159 | 5 | 164 | 94 | 0 | 94 | 253 | 5 | 258 |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| **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 | 2 | 27 | 22 | 49 | 40 | 13 | 53 | 67 | 35 | 102 |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils | 1 | 21 | 0 | 21 | 7 | 0 | 7 | 28 | 0 | 28 |
| Micro nutrient deficiency in crops | 3 | 71 | 2 | 73 | 15 | 0 | 15 | 86 | 2 | 88 |
| Nutrient use efficiency |  |  |  |  |  |  |  |  |  |  |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing | 7 | 194 | 1 | 195 | 47 | 0 | 47 | 241 | 1 | 242 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Soil and water conservation | 1 | 47 | 0 | 47 | 18 | 0 | 18 | 65 | 0 | 65 |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 3 | 0 | 131 | 131 | 0 | 31 | 31 | 0 | 162 | 162 |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Home Science/Women empowerment** |  |  |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening |  |  |  |  |  |  |  |  |  |  |
| Design and development of low/minimum cost diet | 1 | 0 | 15 | 15 | 0 | 9 | 9 | 0 | 24 | 24 |
| Designing and development for high nutrient efficiency diet | 8 | 39 | 159 | 198 | 20 | 24 | 44 | 59 | 183 | 242 |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Women empowerment | 4 | 0 | 84 | 84 | 0 | 47 | 47 | 0 | 131 | 131 |
| Location specific drudgery production | 1 | 0 | 17 | 17 | 0 | 3 | 3 | 0 | 20 | 20 |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance | 2 | 4 | 19 | 23 | 0 | 3 | 3 | 4 | 22 | 26 |
| Installation and maintenance of micro irrigation systems |  |  |  |  |  |  |  |  |  |  |
| Use of Plastics in farming practices |  |  |  |  |  |  |  |  |  |  |
| Production of small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Small scale processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 15 | 331 | 137 | 468 | 48 | 15 | 63 | 379 | 152 | 531 |
| Integrated Disease Management | 3 | 93 | 5 | 98 | 15 | 0 | 15 | 108 | 5 | 113 |
| Bio-control of pests and diseases |  |  |  |  |  |  |  |  |  |  |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Integrated pest and disease management | 8 | 206 | 16 | 222 | 29 | 6 | 35 | 235 | 22 | 257 |
| Organic farming | 8 | 139 | 135 | 274 | 30 | 29 | 59 | 169 | 164 | 333 |
| **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 | 34 | 76 | 838 | 914 | 0 | 223 | 223 | 76 | 1061 | 1137 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems |  |  |  |  |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **137** | **2109** | **1681** | **3790** | **533** | **415** | **948** | **2642** | **2096** | **4738** |

**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 | 2 | 37 | 2 | 39 | 1 | 0 | 1 | 38 | 2 | 40 |
| 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 | 7 | 53 | 31 | 84 | 58 | 42 | 100 | 111 | 73 | 184 |
| 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) |  |  |  |  |  |  |  |  |  |  |
| Entrepreneurial development of farmers / youths |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **9** | **90** | **33** | **123** | **59** | **42** | **101** | **149** | **75** | **224** |

**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 |  |  |  |  |  |  |  |  |  |  |
| 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 | 3 | 77 | 53 | 130 | 0 | 0 | 0 | 77 | 53 | 130 |
| **TOTAL** | **3** | **77** | **53** | **130** | **0** | **0** | **0** | **77** | **53** | **130** |

**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 | 51 | 6 | 57 | 1 | 0 | 1 | 52 | 6 | 58 |
| Integrated Pest Management | 1 | 22 | 2 | 24 | 1 | 0 | 1 | 23 | 2 | 25 |
| Integrated Nutrient management |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  |  |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Women and Child care |  |  |  |  |  |  |  |  |  |  |
| Low cost and nutrient efficient diet designing | 1 | 0 | 23 | 23 | 0 | 7 | 7 | 0 | 30 | 30 |
| Group Dynamics and farmers organization |  |  |  |  |  |  |  |  |  |  |
| Information networking among farmers |  |  |  |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  |  |  |  |  |  |  |  |  |
| Management in farm animals |  |  |  |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  |  |  |  |  |  |  |  |  |
| Household food security | 1 | 0 | 29 | 29 | 0 | 4 | 4 | 0 | 33 | 33 |
| **Any other (pl.specify)** |  |  |  |  |  |  |  |  |  |  |
| 1. Soil health and fertility management | 2 | 51 | 4 | 55 | 1 | 0 | 1 | 52 | 4 | 56 |
| 1. Integrated Farming System | 2 | 27 | 2 | 29 | 5 | 5 | 10 | 32 | 7 | 39 |
| 1. Integrated Agriculture Training | 2 | 33 | 6 | 39 | 2 | 2 | 4 | 35 | 8 | 43 |
| **Total** | **11** | **184** | **72** | **256** | **10** | **18** | **28** | **194** | **90** | **284** |

**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 |  |  |  |  |  |  |  |  |  |  |
| Information networking among farmers |  |  |  |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  |  |  |  |  |  |  |  |  |
| Management in farm animals |  |  |  |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  |  |  |  |  |  |  |  |  |
| Household food security | 1 | 0 | 14 | 14 | 0 | 3 | 3 | 0 | 17 | 17 |
| Any other (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing | 1 | 26 | 3 | 29 | 6 | 0 | 6 | 32 | 3 | 35 |
| **Total** | **2** | **26** | **17** | **43** | **6** | **3** | **9** | **32** | **20** | **52** |

7.G. Sponsored training programmes conducted

| **S. No.** | **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** | **Crop production and management** |  |  |  |  |  |  |  |  |  |  |
| 1.a. | Increasing production and productivity of crops |  |  |  |  |  |  |  |  |  |  |
| 1.b. | Commercial production of vegetables | 2 | 154 | 57 | 211 | 0 | 0 | 0 | 154 | 57 | 211 |
| **2** | **Production and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Fruit Plants |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Ornamental plants |  |  |  |  |  |  |  |  |  |  |
| 2.c. | Spices crops |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Soil health and fertility management** | 14 | 480 | 71 | 551 | 134 | 19 | 153 | 614 | 90 | 704 |
| **4** | **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| **5** | **Methods of protective cultivation** |  |  |  |  |  |  |  |  |  |  |
| **6** | **Others (pl.specify)** |  |  |  |  |  |  |  |  |  |  |
| **7** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 7.a. | Processing and value addition | 4 | 65 | 41 | 106 | 16 | 17 | 33 | 81 | 58 | 139 |
| 7.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | Storage loss minimization techniques | 1 | 50 | 0 | 50 | 0 | 0 | 0 | 50 | 0 | 50 |
| **8** | **Farm machinery** |  |  |  |  |  |  |  |  |  |  |
| 8.a. | Farm machinery, tools and implements | 1 | 14 | 4 | 18 | 4 | 27 | 31 | 18 | 31 | 49 |
| 8.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **9.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| **10** | **Livestock production and management** |  |  |  | 0 |  |  | 0 | 0 | 0 | 0 |
| 10.a. | Animal Nutrition Management | 1 | 0 | 0 | 0 | 0 | 34 | 34 | 0 | 34 | 34 |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **11.** | **Home Science** |  |  |  |  |  |  |  |  |  |  |
| 11.a. | Household nutritional security | 2 | 4 | 86 | 90 | 0 | 4 | 4 | 4 | 90 | 94 |
| 11.b. | Economic empowerment of women | 39 | 78 | 937 | 1015 | 0 | 275 | 275 | 78 | 1212 | 1290 |
| 11.c. | Drudgery reduction of women |  |  |  |  |  |  |  |  |  |  |
| 11.d. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **12** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 12.a. | Capacity Building and Group Dynamics | 2 | 59 | 2 | 61 | 15 | 2 | 17 | 74 | 4 | 78 |
| 12.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | Crop Diversification | 3 | 101 | 0 | 101 | 17 | 0 | 17 | 118 | 0 | 118 |
|  | Cropping systems | 5 | 98 | 128 | 226 | 9 | 3 | 12 | 107 | 131 | 238 |
|  | Dairy Management | 6 | 18 | 118 | 136 | 1 | 46 | 47 | 19 | 164 | 183 |
|  | Entrepreneurial development of farmers / youths | 3 | 77 | 53 | 130 | 0 | 0 | 0 | 77 | 53 | 130 |
|  | Income generation activities | 2 | 15 | 61 | 76 | 3 | 18 | 21 | 18 | 79 | 97 |
|  | Integrated farming system | 1 | 18 | 1 | 19 | 0 | 0 | 0 | 18 | 1 | 19 |
|  | Integrated water management | 19 | 604 | 239 | 843 | 100 | 71 | 171 | 704 | 310 | 1014 |
|  | Organic farming | 3 | 73 | 74 | 147 | 13 | 9 | 22 | 86 | 83 | 169 |
|  | Vermicompost production | 1 | 19 | 1 | 20 | 0 | 0 | 0 | 19 | 1 | 20 |
|  | **Total** | **109** | **1927** | **1873** | **3800** | **312** | **525** | **837** | **2239** | **2398** | **4637** |

**Details of sponsoring agencies involved**

1. ASF, Hulkoti
2. Karnataka State Department of Horticulture (Sujala Watershed)
3. CADA
4. Karnataka State Department of Agriculture
5. UAS, Dharwad
6. GITSERD, Hulkoti
7. Agricultural Skill Council of India
8. Central Warehousing Corporation, Bengaluru
9. IWMP
10. Petroleum Conservation Research Association
11. Reliance Foundation
12. 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 | 3 | 47 | 5 | 52 | 1 | 0 | 1 | 48 | 5 | 53 |
| 3.b. | Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| 3.c. | Sheep and goat rearing |  |  |  |  |  |  |  |  |  |  |
| 3.d. | Piggery |  |  |  |  |  |  |  |  |  |  |
| 3.e. | Poultry farming |  |  |  |  |  |  |  |  |  |  |
| 3.f. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **4.** | **Income generation activities** |  |  |  |  |  |  |  |  |  |  |
| 4.a. | Vermi-composting | 1 | 19 | 1 | 20 | 0 | 0 | 0 | 19 | 1 | 20 |
| 4.b. | Production of bio-agents, bio-pesticides,  bio-fertilizers etc. | 1 | 18 | 1 | 19 | 1 | 0 | 1 | 19 | 1 | 20 |
| 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) |  |  |  |  |  |  |  |  |  |  |
|  | Entrepreneurship in agriculture |  |  |  |  |  |  |  |  |  |  |
|  | **Grand Total** | **5** | **84** | **7** | **91** | **2** | **0** | **2** | **86** | **7** | **93** |

**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 | Vermicompost producer | 01-12-2018 | 11-01-2019 | 162500 | 19 | 1 | 20 | 0 | 0 | 0 | 19 | 1 | 20 | 20 |
| 2. | Dairy farmer/ entrepreneur | 01-12-2018 | 02-01-2019 | 189600 | 18 | 1 | 19 | 1 | 0 | 1 | 19 | 1 | 20 | 20 |

**PART VIII – EXTENSION ACTIVITIES (2018-19)**

**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 | 10 | 815 | 191 | 1006 | 248 | 50 | 298 | 36 | 7 | 43 |
| Kisan Mela | 1 | 199 | 84 | 283 | 37 | 29 | 66 | 4 | 2 | 6 |
| Kisan Ghosthi | 3 | 143 | 57 | 200 | 7 | 11 | 18 | 7 | 3 | 10 |
| Exhibition | 2 | 13000 | 5500 | 18500 | 1700 | 570 | 2270 | 1520 | 210 | 1730 |
| Film Show | 13 | 84 | 334 | 418 | 37 | 50 | 87 | 0 | 0 | 0 |
| Method Demonstrations | 31 | 331 | 375 | 706 | 52 | 101 | 153 | 21 | 1 | 22 |
| Farmers Seminar | 1 | 103 | 40 | 143 | 25 | 5 | 30 | 5 | 2 | 7 |
| Workshop | 1 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| Group meetings | 10 | 145 | 41 | 186 | 74 | 27 | 101 | 4 | 3 | 7 |
| Lectures delivered as resource persons | 18 | 780 | 848 | 1628 | 227 | 447 | 674 | 338 | 175 | 513 |
| Newspaper coverage | 44 |  |  |  |  |  |  |  |  |  |
| Radio talks | 1 |  |  |  |  |  |  |  |  |  |
| TV talks | 0 |  |  |  |  |  |  |  |  |  |
| Popular articles | 6 |  |  |  |  |  |  |  |  |  |
| Extension Literature | 8 | 750 | 400 | 1150 | 250 | 250 | 500 | 25 | 11 | 36 |
| Advisory Services | 704 | 552 | 27 | 583 | 38 | 29 | 67 | 38 | 20 | 58 |
| Scientific visit to farmers field | 220 | 1059 | 113 | 1172 | 140 | 4 | 144 | 15 | 6 | 21 |
| Farmers visit to KVK | 234 | 851 | 360 | 1211 | 22 | 16 | 38 | 27 | 16 | 43 |
| Diagnostic visits | 25 | 83 | 2 | 85 | 10 | 0 | 10 | 0 | 0 | 0 |
| Exposure visits | 14 | 182 | 266 | 448 | 0 | 0 | 0 | 22 | 1 | 23 |
| Ex-trainees Sammelan | 3 | 88 | 6 | 94 | 12 | 0 | 12 | 2 | 0 | 2 |
| Soil health Camp | 3 | 324 | 31 | 355 | 68 | 29 | 97 | 3 | 0 | 3 |
| Animal Health Camp | 1 | 55 | 15 | 70 | 10 | 3 | 13 | 4 | 0 | 4 |
| Agri mobile clinic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soil test campaigns | 3 | 316 | 27 | 343 | 59 | 25 | 84 | 3 | 0 | 3 |
| Farm Science Club Conveners meet | 2 | 31 | 1 | 32 | 3 | 0 | 3 | 3 | 0 | 3 |
| Self Help Group Conveners meetings | 9 | 0 | 337 | 337 | 0 | 131 | 131 | 50 | 0 | 50 |
| Mahila Mandals Conveners meetings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Celebration of important days (specify)** |  |  |  |  |  |  |  |  |  |  |
| International Yoga day | 1 | 40 | 20 | 60 | 5 | 10 | 15 | 6 | 2 | 8 |
| World environment day | 1 | 30 | 12 | 42 | 4 | 3 | 7 | 4 | 1 | 5 |
| Parthenium Awareness week | 2 | 28 | 10 | 38 | 13 | 0 | 13 | 0 | 0 | 0 |
| World bio fuel day | 1 | 0 | 88 | 88 | 0 | 0 | 0 | 2 | 2 | 4 |
| Vigilance awareness week | 1 | 0 | 24 | 24 | 0 | 7 | 7 | 0 | 0 | 0 |
| National Productivity day / week | 1 | 40 | 25 | 65 | 15 | 18 | 33 | 2 | 1 | 3 |
| Mahila Kisan Diwas | 1 | 10 | 165 | 175 | 0 | 41 | 41 | 0 | 5 | 5 |
| World food day | 1 | 20 | 55 | 75 | 3 | 13 | 16 | 1 | 1 | 2 |
| World soil day | 1 | 181 | 0 | 181 | 18 | 0 | 18 | 13 | 3 | 16 |
| Kisan Diwas | 1 | 103 | 70 | 173 | 18 | 8 | 26 | 15 | 3 | 18 |
| Any Other (Specify) |  |  |  |  |  |  |  |  |  |  |
| Bi-monthly meetings | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 14 | 83 |
| Phone-in programme | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| Swachcha Bharath Abhiyan | 12 | 412 | 403 | 815 | 8 | 18 | 26 | 33 | 24 | 57 |
| Video conference | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 8 |
| **Total** | **1395** | **20775** | **9927** | **30706** | **3103** | **1895** | **4998** | **2281** | **515** | **2796** |

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

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Crop category | **Name of the crop** | **Variety** | **Hybrid** | **Quantity of seed**  **(qtl)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
| Cereals (crop wise) | Rabi Sorghum | SPV-2217 |  | 5.34 | 18500 | 60 |
|  | Foxtail millet | DHFT-109-3 |  | 0.6 | 3300 | 20 |
| Oilseeds | Safflower | PBNS-12 |  | 10.0 | 60000 | 250 |
|  | Safflower | ISF-764 |  | 0.4 | 2400 | 10 |
| Pulses | Bengalgram | JAKI-9218 |  | 51.0 | 510990 | 255 |
|  | Bengalgram | BGD.111-01 |  | 16.0 | 160000 | 80 |
|  | Bengalgram | NBEG-3 |  | 1.0 | 10000 | 5 |
|  | Greengram | DGGV-2 |  | 4.23 | 31500 | 30 |
|  | Greengram | BGS-9 |  | 0.8 | 12000 | 20 |
|  | Redgram | TS-3R |  | 8.49 | 84900 | 218 |
| Commercial crops |  |  |  |  |  |  |
| Vegetables | Onion | Arka-kalyan |  | 8.77 | 881900 | 700 |
| Flower crops |  |  |  |  |  |  |
| Spices |  |  |  |  |  |  |
| Fodder crop seeds | Lucerne |  |  | 0.036 | 6875 | 23 |
|  | Perennial Sorghum |  |  | 0.03 | 1800 | 11 |
|  | Stylo haemata |  |  | 0.06 | 5300 | 20 |
| Fiber crops | Cotton | DDHC-11 |  | 1.47 | 14700 | 25 |
| Forest Species | Sunhemp |  |  | 1.0 | 5000 | 5 |
| Others (specify) | Aswagandha |  |  | 0.5 | 10000 | 12 |
| **Total** |  |  |  | **109.73** | **1815265** | **1734** |

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Hybrid** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial |  |  |  |  |  |  |
| Vegetable seedlings |  |  |  |  |  |  |
| Fruits | Mango | Alphanso |  | 522 | 23490 | 15 |
|  | Cashewnut | Vengurla-4 |  | 1025 | 66625 | 29 |
|  | Tamarind | PKM-1 |  | 150 | 12000 | 14 |
|  | Jamun | Vengurla-1 |  | 100 | 8000 | 14 |
|  | Custard apple | Vengurla-3 |  | 100 | 4000 | 14 |
|  | Curryleaf | Suhashini |  | 130 | 2600 | 14 |
|  | Drumstick | Bhagya |  | 80 | 2400 | 14 |
| Ornamental plants |  |  |  |  |  |  |
| Medicinal and Aromatic |  |  |  |  |  |  |
| Plantation |  |  |  |  |  |  |
| Spices |  |  |  |  |  |  |
| Tuber |  |  |  |  |  |  |
| Fodder crop saplings | Guiniea grass |  |  | 11273 | 8455 | 20 |
|  | Congo signal |  |  | 26420 | 19815 | 20 |
|  | Hybrid napier grass |  |  | 4360 | 4360 | 10 |
|  | Rhodes grass |  |  | 20580 | 15435 | 20 |
| Forest Species | Melia dubia |  |  | 900 | 9000 | 14 |
| Others(specify) |  |  |  |  |  |  |
| **Total** |  |  |  | **65640** | **176180** | **198** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bio Products** | **Name of the bio-product** | **Quantity**  **Kg** | **Value (Rs.)** | **Number of**  **farmers to**  **whom provided** |
| Bio Fertilizers | Vermiwash | 121 lit | 3630 | 19 |
|  | Vermicompost | 16760 Kg | 50280 | 75 |
| Bio-pesticide |  |  |  |  |
| Bio-fungicide |  |  |  |  |
| Bio Agents | Earthworms | 99 Kg | 29725 | 44 |
| Others (specify) | Azolla | 30 Kg | 2950 | 28 |
| **Total** |  | **17010** | **86585** | **166** |

# 9.D. Production of livestock materials :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particulars of Live stock | **Name of the breed** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| **Dairy animals** |  |  |  |  |
| Cows |  |  |  |  |
| Buffaloes |  |  |  |  |
| Calves | Dharwad | 2 | 4000 | 2 |
| Others (Pl. specify) |  |  |  |  |
| **Poultry** |  |  |  |  |
| Broilers |  |  |  |  |
| Layers | Giriraja | 200 | 24000 | 10 |
| Duals (broiler and layer) |  |  |  |  |
| Japanese Quail |  |  |  |  |
| Turkey |  |  |  |  |
| Emu |  |  |  |  |
| Ducks |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Piggery** |  |  |  |  |
| Piglet |  |  |  |  |
| Others (Pl.specify) |  |  |  |  |
| **Fisheries** |  |  |  |  |
| Fingerlings |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |
| **Total** |  | **202** | **28000** | **12** |

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

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

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

|  |  |  |
| --- | --- | --- |
| **Date of Start** | **Periodicity** | **No. of Copies distributed** |
| English News Letters – January, 2003 | Monthly | 500 |
| Krishi Darpana in Kannada language – October 2015 | Monthly | 500 |

(B) Literature developed/published

| **Item** | **Title** | **Authors name** | **Number** |
| --- | --- | --- | --- |
| Research papers |  |  | 0 |
| Technical reports | Dairy project reports | Dr. B.M.Murgod  Programme Assistant  (Animal Science) | 5 |
| Technical reports | Sheep and goat rearing project reports | Dr. B.M.Murgod  Programme Assistant  (Animal Science) | 4 |
| News letters | Krishi Darpana | All staff | 500 |
| Technical bulletins | Krishi Vigyan Patrike | All staff | 500 |
| CADA training manual | All staff | 1500 |
| Popular articles | Control of Spodaptera Pujiperada / Pal Sainik Hulu in Maize crop | Shri S.K.Mudlapur  SMS (Plant Protection) | 8000 |
| Popular articles | Contingent crop planning | Shri V.D.Vaikunthe  SMS (Agronomy) | 8000 |
| Popular articles | Cultivation practices in Groundnut crop | Shri V.D.Vaikunthe  SMS (Agronomy) | 8000 |
| Popular articles | Millets for good health | Dr. Sudha V. Mankani  SMS (Home Science) | 8000 |
| Popular articles | Spiral Separator | Dr. Sudha V. Mankani  SMS (Home Science) | 8000 |
| Popular articles | Cashew crop | Dr. Sudha V. Mankani  SMS (Home Science) | 1000 |
| Extension literature | Healthy foods for healthy life | Dr. Sudha V. Mankani  SMS (Home Science) &  Dr.L.G.Hiregoudar  Senior Scientist and Head | 120 |
| Extension literature | Nutrition garden | Dr. Sudha V. Mankani  SMS (Home Science) &  Shri S.K.Mudlapur  SMS (Plant Protection) | 100 |
| Extension literature | Aarogyakar jeevanakkagi savayava aahar mattu Siridhanyagalu | Dr. Sudha V. Mankani  SMS (Home Science) &  Dr.L.G.Hiregoudar  Senior Scientist and Head | 100 |
| Extension literature | Vividha mevina belegala tantrikate | Dr. B.M.Murgod  Programme Assistant (Animal Science) | 75 |
| Extension literature | Pest and disease management in Bt.Cotton | Shri S.K.Mudlapur  SMS (Plant Protection) | 50 |
| Extension literature | Entrepreneurship in modern dairy farming | Dr. B.M.Murgod  Programme Assistant (Animal Science) | 20 |
| Extension literature | Vermicompost production | Shri S.K.Mudlapur  SMS (Plant Protection) | 20 |
| Others (Pl. specify) |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **TOTAL** |  |  |  |

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Type of media** | **Title** | **Details** |
| 1 | CD / DVD | Soil testing | Method of taking soil sample for soil testing is explained |
|  | Spiral Separator | Working of Spiral Separator and advantages of using Spiral Separator is shown in the video |
|  | Functional clothing kit | Uses of functional clothing kit during taking up of plant protection measures and harvesting of crop is shown in the video |
| 2 | Mobile Apps | Bengalgram | All Information regarding Bengalgram crop i.e Introduction, weather, cultivation, plant protection, harvesting, post harvest technology, marketing and value addition |
| 3 | Social media groups with KVK as Admin | WhatsApp – KVK, HULKOTI, GADAG |  |
| 4 | Facebook account name | Khp Kvk Hulkoti |  |
| 5 | Instagram account name | - |  |
|  |  |  |  |
|  |  |  |  |

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

1. **LEVERAGING PROFIT FROM IFS UNDER ORGANIC FARMING**

**A Success Story of a Farm Women - Smt. Yashoda A. Halli**

Life has never been a very easy one for Smt. Yashoda Ashok Halli of Shagoti village in Gadag block and district. After getting married to Shri Ashok, she used to work very hard along with her husband in their 3.30 acres of dryland. They used to cultivate Groundnut under rainfed situation. It was very difficult to support their livelihood from this rainfed piece of red soil until they came in contact with KVK. During 2010-11, Smt. Yashoda attended training programme at KVK on Organic Farming practices in vegetable cultivation. Immediately after the training programme, she started production of organic inputs viz., Vermicompost and Jeevamruta under the guidance of KVK Scientists. She also established a bio-digester unit with a financial support from Savayava Bhagya Yojanae (Organic Farming Project) of State Department of Agriculture. Then, she got a borewell dug in her farm and started cultivation of seasonal vegetables through drip irrigation system installed under the subsidy scheme of State Department of Horticulture. Different vegetables viz., Brinjal, Green Chilli, Cucumber, Rigdeguard and Drumstick are cultivated under Organic Farming practices. She also cultivate Papaya and Watermelon. She uses organic inputs as nutrients for the crops and uses neem oil for management of pest and diseases in vegetables. She never used pesticides and chemical fertilizers in her farm.

During 2012-13, she was one of the participant farm women under Integrated Farming System programme of KVK. After studying her farm and enterprises, KVK introduced improved varieties of grasses (Hybrid Napier, Rhodes grass, Guinea grass and Signal grass in 10 gunta area), Guava (50 nos.), Mango (40 nos.), Cashewnut (30 nos.), drumstick (50 nos.) and Curry leaf (100 nos.) as IFS components. This intervention of KVK gave lot of confidence to Smt. Yashoda, as KVK Scientists visited her farm regularly and provided appropriate farm advisory services. This helped her to get good income from vegetable cultivation also.



During 2017-18, she got net income of Rs. 1.50 lakhs from cultivation of Ridge guard and Green Chilli. Her husband purchased small goods transport vehicle during 2013-14 and started own marketing of vegetables in different corners of the Gadag city as well as Wednesday Bazar being run by KVK at Hulkoti village. This direct marketing of vegetables has increased the profit margin from vegetable cultivation. She also got income of Rs.1.30 lakhs from Papaya and Watermelon during the same year.

Her farm has become a source of planting material for farmers for improved grass varieties introduced by KVK. From 2013-14 to 2017-18, Smt. Yashoda sold the grass slips to 316 farmers belonging to Gadag and neighbouring districts. Apart from spreading the technology to other farmers, she earned Rs.1.60 lakhs from sale of grass slips during last 3 years.

Smt. Yashoda owns four cows and two are in milking stage. She collects 10 liters of milk everyday and supplies to the milk dairy in her village and earns Rs.30,000 to Rs.35,000 per year. The bio-degradable agriculture waste produced in the farm is systematically recycled by her in the form of preparation of Vermicompost, Slury from Gobar gas unit and Jeevamruta. The application of these inputs has improved soil fertility status of her farm and improved the quality of agriculture produce.

Looking into the success of Smt. Yashoda, University of Agricultural Sciences, Dharwad has conferred her Best Farm Women during 2014-15 and she was also awarded Best District Level Farm Women by ATMA Cell of State Department of Agriculture, Gadag during the year 2017-18 and received cash prize of Rs.10,000/-. She says that she is getting average income of Rs.5.50 lakhs per year from 3.30 acres of land from crop and other enterprises. Further, she says that income from Cashew and Mango are yet to come. She says that involvement of family members in all the agriculture operations and use of on-farm production of organic inputs has reduced the cost of cultivation. She credits her success to KVK, Gadag and her husband for support and help in her endeavour

1. **CASHEWNUT: AN ALTERNATIVE CASH CROP FOR GADAG DISTRICT**

**SUCCESS STORY OF A CASHEW FARMER**

Subhas H. Adappagoudar of Hulkoti village in Gadag district never knew that one day he would be honoured at National Level as a Successful Cashewnut farmer. Having faced many constraints in cultivation of convetional cropping system, Subhas has started Cashewnut cultivation during 2015-16. Initially he was reluctant to take Cashewnut cultivation as the crop is new to him. Many times he visited successful establishmnet of Cashew in KVK’s Instructional Farm and interacted with KVK Experts regarding various aspects from production to marketing. Seminar organised by KVK on Cashew cultivation during 2014-15 was an eye opener for Mr. Subhas. He participated in the Seminar and interacted with experts on Cashew and it had a great impact on him. During 2015, he took up Cashew cultivation in 17 acres of area (1700 plants). Before planting he got soil and water analysed at KVK and parameters were most suitable for Cashew cultivation. Cashew grafts of Vengurla-4 variety were supplied to him by KVK under Cashew Promotion Scheme of Directorate of Cashew and Coa Development, Cochin. Mr. Subhas adopted drip irrigation method and followed all the practices recommended by KVK for successful establishment of Cashew crop. During the period of three years from 2015-16 to 2018-19, he followed all the the Scientific advisories and technologies on gap filling, removal of unwanted shoots, plant protection and plant nutritional measures.

3 year old Cashew plants are robust and healthy. These 3 year old plants (1700 nos.) were allowed to bear fruits. Mr.Subhas harvested 5 tonns of raw nuts and sold to “Achala Industries, Mangalore” at the rate of Rs.178/- per Kg. He got gross income of Rs.9.28 lakhs from 17 acres of Cashew Orchard. He spent about Rs.1.75 lakhs for the management of Cashew Orchard. Net income from Cashew was Rs.7.27 lakhs. This income motivated Mr.Subhas for expansion of area under Cashew. During 2018-19, he extended area of Cashewnut to another 10 acres. During the current year (2018-19) he is expecting an income of Rs.18-20 lakhs from 17 acres.



The Cashew Orchard has become a model for the farmers of North Karnataka. Farmers of Koppal, Bagalkot, Dharwad, Ballary, Chitradurga, Haveri, Vijayapura districts visited the Cashew Orchard and got motivated to go for Cashew cultivation.

 This Orchard has become an extension arm of KVK for pormotion of Cashewnut in Gadag district. Many farmers who have visited this Orchard have established Cashew Orchard. “No doubt, this Orchard has contributed a lot for establishment of Cashew in Gadag district to the extent of 500 hectares”.

Looking into the success of Mr.Subhas, Directorate of Cashew and Cocoa Development, Cochin felicitated him during National Seminar on Cashew held at Vijayawada during February, 2019.

1. **THE STORY OF A MILLET MAN**

Life has never been easy for Mr.Nagappa Shankrappa Halli of Hulkoti village in Gadag block. Mr.Halli, aged 45 years is a small farmer having land holding of 3.15 acres under dryland. He has planted Mango (120 plants) 10 years ago under KVK guidance. After 6th year of planting, he started getting income of Rs.30,000/- to Rs.35,000/- per year. During 2016-17, Mr.Halli participated in KVK’s FLD programme of Millet promotion. Browntop, Foxtail, Kodo and Little Millet were demonstrated as a intercrop in Mango. The Millet crops were demonstrated successfully by involving KVK Scientists. Field day was also organised. During the field day, lot of questions were raised about the marketing of Millets. Mr.Halli harvested 15 quintals of Browntop Millet, 7 quintals of Foxtail Millet, 4 quintals of Kodo Millet and 2 quintals of Little Millet. The price of Millets was very less during that year. KVK advised him not to sell the produce. During subsequent year of 2017-18, KVK involved Mr.Halli in Entrepreneurship Development and Marketing of Millet programme. KVK Scientists trained him in processing of Millets, packing, labelling and marketing skill. Under KVK guindance, he processed Millets grown in previous year. He got 10 quintals of processed Browntop Millet, 4 quintals of Foxtail Millet, 2 quintals of Kodo Millet and 1 quintal of Little Millet. He packed the Millets in 1 and 2 Kg packets along with label containing details of the produce. KVK helped him to develop literature on Millets and it’s nutritional importance.

KVK facilitated Mr.Halli to participate in various exhibitions. During last 2 years he has been participating in Krishi Melas of UAS, Dharwad, Gadag Utsav, Siridhanya Mela organised by Department of Agirculture and exhibitions organised by KVK, Hulkoti. Participation in exhibitions has brought him required confidence to market the produce. He says that, sale of 1 quintal of processed Browntop Millet fetched him net profit of Rs.9000/-, whereas the unprocessed grains for Rs.4000/- per quintal. Further, he says that he gets net profit of Rs.8000 from sale of processed Foxtail grains. Every year Mr.Halli gets an income of Rs.1.5 to 2.0 lakhs from sale of processed Millets.



Every year 60-70 people enquire him about Millets. Out of them, 50 percent of people purchase processed Millets from him. People send money online to his account in advance and he sends the produce through courier.



Apart from income from sales of processed millets, he get Millet bran which he feeds to his cows. It has been a wonderful journey for him for last 3 years as he learnt many things from Millet production to marketing. His expertise is being used by KVK for Millet promotion and processing. He is popularly called as “MILLET MAN” in his neighbourhood.

1. **VERMICELLI PRODUCTION**

**AN ADDITIONAL INCOME GENERATING ACTIVITY**

Smt. Shobha Shivappa Angadi, aged 40 years is a resident of Hosalli village in Gadag block located is 3 kms away from ICAR-K.H.Patil Krishi Vigyan Kendra. She owns 5 acres of dryland and cultivate dryland crops like Groundnut, Chilli, Sorghum, Greengram, Onion etc. Due to frequent occurance of drought, the income from the agriculture was not sufficient to meet the livelihood needs of the family. During 2004-05, she came in contact with KVK through the formation of Kaveri Self Help Group. She was an active member in the group and started saving of Rs.10/week. She visited KVK many times and attended training programmes on Entrepreneurship Development, capacity building programmes, empowerement of women through SHGs etc. During the trainings, she learnt about various income generating activities that a women can do at home as an additional source of income.

After the training, she started thinking about various IGAs and she discussed this aspect of initiating the enterprise with her husband. She contacted KVK in 2008-09 and expressed her views on various enterprises. In addition, she told that during agriculture season she is busy in doing farm work and in summer specially during February to May she is free. By taking this into consideration, KVK guided her to takeup Vermicelli Enterprise as there were no Vermicelli units in the village. Accordingly KVK Scientists guided her to contact Karnataka State Department of Agriculture for obtaining the vermicelli machine under the scheme. Then, she contacted KVK for technical guidance and KVK organised exposure visit to Vermicelli enterprise unit to obtain the tecnichalities of enterprise. Accordingly in 2009-10, she purchased vermicelli machine at a cost of Rs.40,000/-. She got subsidy of Rs.12,000/-. In addition she purchased a diesel engine at a cost of Rs.17,000/- to run the machine to avoid electricity problem in the village. On an average, she is spending 1.5 liters of diesel worth Rs.100/- per day for production of 70 to 80 Kgs Vermicelli. Daily she prepares 70 to 100 Kgs of Vermicelli and year by year the production of Vermicelli has been increased from 8 Qtls to 20 - 25 Qtls per year. The cost of Vermicelli for 5 Kgs is Rs.250/-. The profit per Kg is Rs.15-20. On an average, every year she is earning net income of Rs.30,000 to Rs.40,000. At present, the product is marketed in nearby 4 to 6 villages. Recently she bought dough mixing machine at a cost of Rs.10,000 which helps in reducing her time in Vermicelli production.



The success behind her enterprise is none other than her husband. They are not hiring any labours for Vermicelli production. Both Shobha & her husband are engaged in Vermicelli production as there is less agricultural operation in the months from March to May. She proudly says that, KVK helped her to become successful entrepreneurs. She is very much happy about the enterprise as it is giving income security as well as additional employement to her family specially in summer season.

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

1. **Popularisation of Millet and Millet Food through Ethnic Café** :

KVK’s Host Organisation has established “Millet Café” at KVK Campus on Highway No.63. The Café serve Millet based food during hours of breakfast, lunch and dinner. Millet based products are also kept for sale. Posters related to nutritional aspects of Millet, importance of consumption of Millets along with live sample of Millet plants and seeds are displayed in the “Café”. It attracts lot of people daily. It has created lot of awareness on “Millet Nutrition” among the people who visit the Café.

1. **Transfer of Technology through Teachers** :

KVK has organised two batches of training programmes for 47 High School Teachers. The training module included simple aspects of farming i.e. seed treatment, use of improved varieties, soil and water conservation, vermicompost, nutritional garden, fruit and vegetable cultivation. The objective of the training was to build the capacity of teachers so that they can share it with their students who can motivate their parents to adopt improved method of farming practices. There was overwhelming response from the teachers about this mechanism.

1. **Development of Electronic Media** :

KVK has developed 2 mobile apps on improved practices of Bengalgram cultivation and Spiral Separator for grading of grains. These two apps have been uploaded in YouTube. Number of people have seen information presented in the app. Apart from it, KVK developed CD on Soil Sampling Technique. It is being used in KVK’s training programme.

1. **Sensitization to School Children on improved farming practices:**

During the organisation of National Productivity Week Celebration, KVK organised sensitization programme in 5 Schools regarding enhancing productivity of crops through adoption of improved farming practices. 375 School Children including teachers carried the message delivered by KVK Experts.

1. **TOT through FPOs :**

KVK has organised Front Line Demonstration in Safflower crop on ICM practices along with use of improved variety for the member farmers of Ron Farmers Producers’ Organisation. The FLD was sponsored by ICAR-Indian Institute of Oilseed Research, Hyderabad. Two hundred and fifty farmers participated in the demonstrations. The programme has created lot of impact among FPO members regarding enhancing productivity of Safflower crop.

1. **Phone in programme with farmers** :

KVK experts participated in “Phone-in programme with farmers” organised by Vijay Karnataka daily newspaper on 07-06-2018. Sixty two farmers from Gadag and adjacent district farmers asked the questions related to crop suitability, improved varieties, management of weed, pest and disease and post harvest management. KVK Experts answered the queries. The question and answer session of farmers with KVK Experts was published in the next day edition of Vijay Karnataka Newspaper. This mechanism has enhanced the extension efficiency of KVK.

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** |
| --- | --- | --- | --- |
| **1** | Livestock | * Groundnut oil + Soda Bicarbonate * A paste of Garlic, Ginger & Jaggery | For treatment of Bloat |
| **2** | Livestock | Feeding of Alovera Juice | For the treatment of Gastrointestinal parasite in calves, kid & lambs. |
| **3** | Livestock | Animal washing in Canal/river water | For the treatment of foot & mouth disease |
| **4** | Livestock | Turmeric powder mixed in ghee and heated and applied | For the healing of wound |
| **5** | Livestock | Paste prepared from tulsi leaves, turmeric and ajwan and fed to cattle | For the treatment of Pneumonia |
| **6** | Livestock | Washing of hoves of animals with lime water | For the treatment of foot and mouth disease |
| **7** | Livestock | Zeera & Garlic are boiled in water and is fed | For the treatment of fever |
| **8** | Livestock | * Tobacco shoot with Kerosine oil paste is made and applied * Leaves of neem or neem oil | For the treatment of ecto parasite infestation |
| **9** | Livestock | Paste of alovera liquid is applied on udder & teats | For the treatment of mastitis for swelling reduction |

**10 F. Technology Week celebration during 2018-19:**

Period of observing Technology Week: **From 22-01-2019 to 28-01-2019**

Total number of farmers visited : **11536**

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 | 3 | 290 | Cashewnut crop, Onion & Chilli crop, Tomato & other vegetables |
| Lectures organized | 7 | 300 | Lectures organized on crop technologies |
| Exhibition | 1 | 8150 | Crop, livestock and have science technologies |
| Film show | 2 | 240 | Mango & Cashew |
| Fair | 1 | 355 | Rabi & Summer crop campaign |
| Farm Visit | 3 | 201 | Rabi crops, Livestock, Agricultural Machineries |
| Diagnostic Practicals | - | - | - |
| Supply of Literature (No.) | 8 | 2000 | 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** | **25** | **11536** |  |

**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 | 7456 | 14015 | 296 |
| Water Samples | 4040 | 3945 | Same villages |
| Plant samples | 76 | 76 | Same villages |
| Manure samples | - | - | - |
| Others (specify) | - | - | - |
| Total | 9652 | 13840 | 292 |

C. Details of samples analyzed during the 2018-19 :

|  |  |  |  |
| --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages |
| Soil Samples | 1230 | 3533 | 213 |
| Water Samples | 670 | 643 | Same villages |
| Plant samples | 20 | 20 | Same villages |
| Manure samples | - | - | - |
| Others (specify) | - | - | - |
| Total | 1920 | 4196 | 213 |

11.2 Mobile Soil Testing Kit : NIL

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 2018-19 and since establishment with Mobile Soil Testing Kit:

|  |  |  |
| --- | --- | --- |
|  | Progress during 2018-19 | Cumulative progress |
| Samples analyzed (No.) | 325 | 1128 |
| Farmers benefited (No.) | 991 | 3321 |
| Villages covered (No.) | 06 | 19 |

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit during 2018-19:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | Date (s) | Villages (No.) | Farmers (No.) | Samples analyzed (No.) | Soil health cards issued (No.) |
| SWTL | From 1st April to 31st March 2019 | 207 | 2542 | 905 | 2542 |
| Mobile Soil Testing Kit | From 1st April to 31st March 2019 | 06 | 991 | 325 | 991 |

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 | 230 | 454 | - | 1. Mr. S.P.Baligar   President, Zilla Panchayat, Gadag  2) Mr. Mohan Durgannavar  President, Taluk Panchayat, Gadag  3) Mr. G.C.Koravanavar  Member, APMC, Gadag  4) Mr.C.B.Balaraddi  Joint Director of Agriculture  Gadag | 4 | 3 |

**PART XI. 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)** |
| Use of JAKI-9218 variety of Bengalgram | 450 | 70 | Rs.25,000/ha | Rs.32,000/ha |
| Processing of Browntop Millet along with EDP skills | 30 | 60 | Rs.4000/Qtl | Rs.9000/ Qtl |
| Nipping in Bengalgram | 250 | 50 | Rs.20,000/ha | Rs.26,000/ha |
| DGGV-2 variety of Greengram | 210 | 60 | Rs.27,000/ha | Rs.30,000/ha |
| Seed production technique in Onion crop | 30 | 70 | Rs.1,30,000/ha | Rs.1,70,000/ha |
| Feeding of Silage Fodder to CB Cows | 75 | 40 | Rs.40,000/  lactation/cow | Rs.50,000/  lactation/cow |
| Farm Pond based protective irrigation in Greengram | 40 | 50 | Rs.25,000/ha | Rs.45,000/ha |
| Use of SPV-2217 variety in Rabi Sorghum crop | 150 | 70 | Rs.18,000/ha | Rs.26,000/ha |
| Mango special (micronutrient mixture) application | 142 | 50 | Rs.1,00,000/ha | Rs.1,30,000/ha |
| Introduction of Arka Kalyan improved variety in Onion crop | 200 | 40 | Rs.35,000 | Rs.50,000 |

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

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

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 75,000 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 2018-19, KVK organised Front Line Demonstrations in 286 hectares of area covering 665 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 2600 quintals of seed material which FLD farmers supplied to other farmers. Apart from this, KVK produced 65 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 30,000 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 38 hectares area in 7 villages during last 4 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 2017-18 & 2018-19.

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

**MARKETING CHANNEL ANALYSIS OF MANGO FRUIT IN GADAG DISTRICT**

**Introduction:**

Mango is the important fruit crop of Gadag district. It is being cultivated in 1500 hectares of area. The major area under mango is concentrated in Gadag taluk. KVK Gadag promoted Mango in the district as crop diversification strategy in order to bring income security to the farmers. Though farmers are getting good technical support from KVK in production and post harvest technology for quality fruit production, most of the farmers prefer pre-harvest contract of Mango orchard. Growers also practice other method of marketing i.e. selling of raw mangoes (unripe), selling to retailers and own marketing. Mango being the alternative bearer, lot of risks are involved in production and marketing of Mango for farmers as well as the different actors in the marketing chain. Un-favourable weather is also playing it’s role in quality production of mango.

A study was carried out by KVK in order to understand the marketing strategy adopted by the farmers. The objectives of the study are as follows:

**Objectives:**

1. To know the socio-economic profile of mango growers.
2. To know the different marketing strategies adopted by the mango growers.
3. Income analysis of different marketing strategies.

**Methodology of Study:**

The study was undertaken in Gadag taluk of Gadag district. Major mango growing villages viz., Hulkoti, Shagoti, Hosalli and Dundur were selected for the study. A total samples of 78 Mango Growers having mango orchards more than 5 years old trees were taken as sample for the study. Structured questionnaire was developed and information was collected from the respondents.

Information from 5 pre-harvest contractors was also collected. The data was analysed using simple frequency and percentage method.

**1) Land holding:** Categorisation based on area under mango

The information related to land holdings of the respondents based on area under mango are shown in Table-1 and it indicates that, 19 respondent are small farmers, 29 farmers falls under medium category farmers and 30 farmers belonged to large farmer category.

**Table–1 : Land holding pattern of respondents based on area under mango**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No** | **Category of farmers** | **Size of Land holdings based on area under mango (in Acre)** | **Number of Farmers** | **Percentage** |
| 1 | Small | <=2.5 | 19 | 24.36 |
| 2 | Medium | >2.5 and <5 | 29 | 37.18 |
| 3 | Large | >5 | 30 | 38.46 |
| **Total** | | | **78** | **100.00** |

**2) Education status of the respondents**

The education status respondents is categorized into 5 groups as indicated in Table-2. The number of respondents found to be illiterate is 1.28 percent. 28.21 per cent studied primary education, 23.07 per cent studied high school, 34.61 per cent PUC/XIIth Standard, Degree holders 10.25 per cent, and master Degree holders are found to be 2.56 per cent.

**Table-2: Educational status of the respondents**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Education Status** | **Number of Respondents** | **Percentage** |
| 1 | Illiterates | 1 | 01.28 |
| 2 | <=7th | 22 | 28.21 |
| 3 | <=10th | 18 | 23.07 |
| 4 | PUC/XIIth | 27 | 34.61 |
| 5 | Bachelor Degree | 8 | 10.25 |
| 6 | Master Degree | 2 | 02.56 |
| **Total** | | **78** | **100.00** |

**3) Age of the respondents**

The age of the respondents is classified into 4 categories. Out of 78 respondents, 11 respondents are below forty years and they represent 14.10 per cent. 23 respondents belongs to the age between 40-50 and they represent 29.50 per cent. And 22 respondents are in the age group between 50-60 and they represent 28.20 per cent. Finally 22 respondents are above the age of 60 and they represent 28.20 per cent.

**Table-3: Classification of age of mango growers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Age** | **No of Respondents** | **Percentage** |
| 1 | <40 | 11 | 14.10 per cent |
| 2 | >40,<50 | 23 | 29.50 per cent |
| 3 | >50,<60 | 22 | 28.20 per cent |
| 4 | >60 | 22 | 28.20 per cent |
|  | **Total** | **78** | **100.00** |

**4) Marketing Strategies adopted by mango growers**

Out of 78 mango growers, 45 per cent have adopted the pre harvesting contract system to get the income from their mango orchard and 6 per cent of the respondents are selling raw mango (unripe), 9 per cent of the respondents selling mangoes directly to the retailers and 40 per cent of the growers are following their own marketing strategy, without involving middle man.

**Table-4: Details of mango growers following different marketing strategies**

|  |  |  |
| --- | --- | --- |
| **Marketing Strategies** | **No of Farmers** | **Percentage (%)** |
| Pre Harvesting Contract (PHC) | 35 | 45 |
| Selling Raw Mangoes (RM) | 5 | 06 |
| Selling mangoes directly to Retailer (DR) | 7 | 9 |
| Own Marketing (OM) | 31 | 40 |
| **Total** | **78** | **100** |

**5) Maintenance cost of mango orchard by farmers and bhagawans (per acre):**

Maintenance cost of mango orchard was studied in different market strategies. Year-wise maintenance cost from 2016 to 2018 is presented in Table-5. In harvest contract method, farmers do not have maintenance cost as mango orchard is taken care by pre-harvest contractors. Farmers who sell raw mangoes, average maintenance cost is Rs.10,796/-. Growers who are selling ripe mangoes directly to retailers incur Rs.12,959/- as maintenance cost. Rs.13,500/- is the average cost of maintenance for growers who have adopted own marketing strategy and bhagwans (pre-harvest contractors) incurred Rs.11,213/- as average maintenance cost for 3 years.

**Table-5: Maintenance cost of mango orchard by farmers and bhagawans**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **AVERAGE MAINTENANCE COST PER ACRE** | | | | |
| **Channel** | **2016** | **2017** | **2018** | **Average** |
| Pre harvest contract  (farmers) | NIL | NIL | NIL | NIL |
| Selling raw mangoes (farmers) | 10320 | 10826 | 11240 | 10795 |
| Selling mangoes directly to retailer (farmers) | 12578 | 13048 | 13250 | 12958 |
| Own marketing (farmers) | 12680 | 13340 | 14480 | 13500 |
| Bhagawans  (Pre-harvest contractors) | 9783 | 11489 | 12368 | 11213 |

**6)Wastage of fruits in various channels:**

The study also probed the wastage of fruits during different stages of production, ripening and marketing. It is found that farmers having own marketing strategies and selling to retailers channel, lot of wastage is noticed. It is interesting to note that bhagawans who are pre-harvest contractors have incurred less wastage during harvesting and ripening.

**Table-6: Wastage of fruits in various channel**

|  |  |  |
| --- | --- | --- |
| **Channel** | **Wastage during harvesting (%)** | **Wastage during ripening (%)** |
| Own marketing | 12.00 | 15.73 |
| Selling to retailers | 11.60 | 13.00 |
| Bhagawan | 7.00 | 9.00 |

**7) Net profit realised in different marketing channel:**

The data presented in Table-7 indicates the profit earned by the mango growers by the different marketing channels. The farmers who followed the pre harvest contract, got average profit of Rs.27,869/- without bearing any risk in marketing. It clearly indicates that the pre harvest contract is better marketing channel to get marginal profit without any risk. Mango growers who are selling raw mangoes immediately after harvesting are getting an average net profit of Rs.39,105/- per acre. It shows that selling the raw mangoes is better than pre harvest contract. Selling the mangoes to the retailer without any middleman or wholesaler is also a best marketing strategy to get more profit, as this strategy has given net income of Rs.42,039/- per acre. It also shows that selling the mangoes directly to the retailer is more profitable than the pre-harvest contract and selling the raw mangoes. Further the mango growers of the study area are following another most profitable marketing channel i.e., “Own Marketing Strategy”. The information which is presented in the Table-7 clearly indicates that those who sell mangoes with their own brand earned average income of Rs.59,322/- per acre. This data clearly indicates that the Own Branding and marketing strategy is more profitable than the other three marketing channels.

**Table-7: Average Net Profit per acre by different marketing channels**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Pre harvest Contract**  **n=35** | **Selling of Raw Mangoes**  **n=5** | **Selling of Mangoes Directly to Retailer**  **n=7** | **Own Marketing**  **n=31** |
| 2016 | 29605.00 | 44213.00 | 45600.00 | 74590.00 |
| 2017 | 32162.00 | 47006.00 | 50543.00 | 70700.00 |
| 2018 | 21840.00 | 25827.00 | 29976.00 | 32678.00 |
| Total | 83607.00 | 117046.00 | 126119.00 | 177968.00 |
| **Average** | **27869.00** | **39105.00** | **42039.00** | **59322.00** |

**8) Comparison of net profit of farmers with bhagawans:**

**** Data presented in Table-8 reflects comparison of net income in different marketing channel. Bhagawans are getting the major share of income in the mango marketing process (Rs.86,321/- per acre). Farmers with own marketing strategies gets Rs.59,130/- net income followed by Rs.42,040/- in selling directly to retailers. Rs.39,015/- in selling raw mangoes and Rs.27,869/- through pre-harvest contract**.** Bhagawans are getting more profit because they are having marketing linkages across districts and states and market the fruits which is not possible for the farmers. Bhagawans employes their own family labour for maintenance of orchards resulting in less maintenance cost. Further Bhagawans use chemical methods of ripening the fruits and the fruits look attractive. Thus it may be the reason for easy marketing of fruits.

**Table-8: Comparison of Average Profit of the Farmers and Bhagwans/per acre**

|  |  |
| --- | --- |
| **Marketing Channel** | **Average Profit per acre (Rs.)** |
| Pre- harvest contract (Farmer) | 27,869 |
| Raw Mangoes (Farmer) | 39,015 |
| Directly to retailer (Farmer) | 42,040 |
| Own Brand (Farmer) | 59,130 |
| Bhagwan (Pre- harvest contractor) | 86,321 |

**Conclusion:**

The study carried out to analyse the different marketing strategies in mango, reveals that four strategies are adopted by the farmers for marketing of mango fruit i.e. pre-harvest contracting, selling of raw mangoes, selling of naturally ripened fruits to retailers and own marketing strategies. Among these strategies own marketing strategy is best strategy as mango growers have earned the net income of Rs.59,322/- per acre followed by selling directly to retailers (Rs.42,039/-) and growers selling raw mangoes got net income of Rs.39,105/-. Farmers have got Rs.27,869/- from pre-harvest contract method.

Bhagawans who have taken pre-harvest contract of mango orchard from farmers got average net profit of Rs.86,321/- per acre. There is 2-3 fold increase in net profit compared to other methods of marketing. This is due to good marketing linkages of the Bhagawans across the State. They hardly face problem in marketing of fruits. The cost of maintenance of orchards and wastage of fruits in harvesting and ripening of fruits is also less. Bhagawans use chemicals for ripening of fruits and the ripen fruits appear very attractive resulting in easy marketing of fruits. These are the contributing factors for more profit to the Bhagawans compared to farmers.

There is need to educate the mango growers to adopt own marketing strategies for getting more profit from mango cultivation and educate the people to consume naturally ripened mango fruits for good health.

**PART XII - LINKAGES**

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

|  |  |
| --- | --- |
| **Name of organization** | **Nature of linkage** |
| Directorate of Cashewnut and Cocoa Development, Cochin | 1. Awareness on Cashew promotion 2. Organisation of Seminar on Cashewnut crop 3. Training on production technology of Cashewnut 4. Study tour for farmers to cashew research station and progressive farmers’ fields 5. Advisory services for cashew farmers |
| Agriculture Skill Council of India | Organization of Skill Training on job role  “Vermicompost Producer and Dairy Entreprenurship” |
| University of Agricultural Sciences, Dharwad | Organization of Innovative Farmers to Farmers training programme and technical backup for all staff |
| Indian Institute of Oilseed Research, Hyderabad | Organization of FLDs on Safflower |
| Karnataka State Department of Agriculture | Training programmes & serving as Resource Persons in different schemes, organisation of extension activities |
| Karnataka State Department of Horticulture | Capacity building of FPOs |
| Command Area Development Authority, Belagavi and Munirabad | Training of farmers in Malaprabha, Ghataprabha and Tungabhadra Command Area on Soil, Crop and Water Management |
| Reliance Foundation | Capacity Building Programme for FPOs |

**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.)** |
| Capacity Building of FPOs | June, 2018 | Karnataka State Department of Horticulture | 3,00,000 |
| Agricultural Skill Council of India | December, 2018 | ASCI, New Delhi | 3,67,000 |

**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** | ATMA Regional workshop & other meetings | 4 | 4 | - |
| 02 | **Research projects** | - | 1 | 1 | - |
| 03 | **Training programmes** | * ICM * Food processing * Nutrition and health * Organic farming | 6 | 15 | - |
| 04 | **Demonstrations** | - | 6 | 150 | Jointly organized with ATMA funding |
| 05 | **Extension Programmes** |  | 11 | 10 | Jointly organized with ATMA |
|  | Kisan Mela | - | 1 | 1 | - |
|  | Technology Week | - | 1 | 1 | Jointly organized with ATMA |
|  | Exposure visit | - | - | - | - |
|  | Exhibition | - | 1 | 1 | Jointly organized with ATMA |
|  | Soil health camps | - | 2 | 2 | Jointly organized with ATMA |
|  | Animal Health Campaigns | - | - | - | - |
|  | Others (Pl. specify) | - | - | - | - |
| 06 | **Publications** |  |  |  |  |
|  | Video Films | - | 1 | 1 | - |
|  | Books | - | - | - | - |
|  | Extension Literature | - | 2 | 2 | - |
|  | Pamphlets | - | - | 5 | Jointly published |
|  | Others (Pl. specify) | - | - | - | - |
| 07 | **Other Activities (Pl. specify)** | World Soil Health Day | - | 1 | Jointly organized with ATMA |
|  |  | Farmers’ field school | 3 | 0 |  |
|  |  | Capacity development | 1 | 0 |  |

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

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

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

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

**13. G 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** |
| April 2018 | Text | 2 | 2 | 0 | 1 | 1 | 1 | 7 | 15179 |
| May | Text | 0 | 0 | 1 | 2 | 2 | 0 | 5 | 15181 |
| June | Text | 7 | 1 | 0 | 1 | 1 | 2 | 12 | 15185 |
| July | Text | 5 | 2 | 0 | 1 | 1 | 1 | 10 | 15189 |
| August | Text | 2 | 0 | 2 | 1 | 2 | 0 | 7 | 15191 |
| September | Text | 1 | 0 | 4 | 1 | 0 | 1 | 7 | 15191 |
| October | Text | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 15191 |
| November | Text | 3 | 0 | 1 | 1 | 0 | 0 | 5 | 15191 |
| December | Text | 1 | 0 | 1 | 1 | 2 | 1 | 6 | 15198 |
| January 2019 | Text | 1 | 0 | 1 | 1 | 1 | 1 | 5 | 15198 |
| February | Text | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 15198 |
| March | Text | 1 | 1 | 1 | 1 | 0 | 0 | 4 | 15234 |
| **Total** |  | **25** | **7** | **12** | **12** | **12** | **8** | **76** | **15234** |

**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 | 1000 | 5000 | 13000 | - |

**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 | 14.11.18 | 14.03.19 | 1.60 | SPV-2217 | Seeds | 25.0 | 800 | 50000 | - |
| Pearl millet | 21.07.18 | 25.10.18 | 0.20 | VPMH-7 | Seeds | 2.25 | 500 | 9000 | - |
| **Pulses** |  |  |  |  |  |  |  |  |  |
| Greengram | 02.06.18 | 10.08.18 | 5.20 | DGGV-2 | Seeds | 30.0 | 11200 | 180000 | - |
| Bengalgram | 07.11.18 | 21.02.19 | 0.20 | DBGV-204 | Seeds | 1.94 | 1300 | 8730 | - |
| Bengalgram | 07.11.18 | 21.02.19 | 0.15 | GBM-2 | Seeds | 1.92 | 1300 | 8640 | - |
| Bengalgram | 07.11.18 | 21.02.19 | 0.15 | JG-11 | Seeds | 1.60 | 1300 | 7200 | - |
| **Oilseeds** |  |  |  |  |  |  |  |  |  |
| Safflower | 30.10.18 | 07.03.19 | 1.0 | ISF-764 | Seeds | 10.0 | 5500 | 35000 | - |
| **Fibers** |  |  |  |  |  |  |  |  |  |
| **Spices & Plantation crops** | | | | | | | | | |
| Coriander | 06.07.18 | 13.09.18 | 0.60 | Ajjampur local | Seeds | 4.0 | 500 | 14000 | - |
| Cashewnut |  |  | 1.20 | Vengurla-4 | Nuts | 6.0 | 16000 | 96000 | - |
| **Floriculture** |  |  |  |  |  |  |  |  |  |
| **Fruits** |  |  |  |  |  |  |  |  |  |
| Tamarind |  |  | 0.60 | PKM-1 & DTS-1 | Fruit | 20.0 |  | 100000 | - |
| Amla |  |  | 0.60 | Krishna, Kanchan | Fruit | 2.11 |  | 4220 | - |
| Mango |  |  | 0.80 | Alphonso | Fruit | - | - | - | - |
| Guava |  |  | 1.00 | Lucknow-49 | Fruit | 6.0 |  | 6000 | - |
| Sapota |  |  | 1.00 | Cricket ball | Fruit | 6.3 |  | 6300 | - |
| **Vegetables** |  |  | 0.8 | Vengurla-4 | Nuts | 6.0 | 16000 | 96000 | - |
| Onion | 24.07.18 | 23.12.18 | 1.6 | Arka kalyan | Bulb | 38.0 | 16000 | 38000 | - |
|  | 06.07.18 | 23.11.18 | 1.2 | Bhima super | Bulb | 30.0 | 12000 | 30000 | - |
| Onion Seed production | 01.12.18 | 09.04.19 | 0.8 | Arka kalyan | Seeds | 2.5 | 73400 | 200000 | - |
| Onion Seed production | 10.12.18 | 16.04.19 | 0.4 | Bhima super | Seeds | 2.0 | 36700 | 160000 | - |
| **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 | 80.0 Qtl | 20800 | 24000 | - |
| 2 | Earthworms | 0.99 Qtl | 8500 | 29725 | - |
| 3 | Azolla | 0.30 Qtl | 1500 | 2950 | - |

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No** | **Name**  **of the animal / bird / aquatics** | **Details of production** | | | **Amount (Rs.)** | | **Remarks** |
| **Breed** | **Type of Produce** | **Qty.** | **Cost of inputs** | **Gross income** |
| 1 | Buffaloes | Local | Milk | 1515 lit | 44471 | 53025 | - |
| 2 | Sheep | Rambullet local cross | Lamb | 2 lamb | 3000 | 13000 | - |
| 3 | Goat | Jamunapuri local cross | Kid | 2 kid | 5000 | 15000 | - |
| 4 | Poultry | Swarnadhara | Egg | 124 | 425 | 935 | - |

**14.E. 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)** |
| April 2018 | 0 | 0 | - |
| May | 74 | 2 | - |
| June | 1398 | 33 | - |
| July | 577 | 13 | - |
| August | 34 | 1 | - |
| September | 128 | 2 | - |
| October | 32 | 5 | - |
| November | 33 | 2 | - |
| December | 512 | 36 | - |
| January 2019 | 334 | 26 | - |
| February | 188 | 13 | - |
| March | 75 | 11 | - |

**14.F. 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**

| **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.)** |
| 100000 | 100000 | Graded bund construction | 5054.68 cm | 6 | 7 | 0 | 263 | 24 | 108 | 1.13 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 |  |  |  |  |  |  |  |
|  |  | Drip irrigation system for Dry land Horticulture | 5 Ha. |  |  |  |  |  |  |  |
|  |  | Check dam | 1 |  |  |  |  |  |  |  |

**PART XV - FINANCIAL PERFORMANCE**

**15A. 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 |

**15B. Utilization of KVK funds during the year 2018-2019 (Rs. in lakh)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 15000000 | 15000000 | 15000000 |
| 2 | **Traveling allowances** | 150000 | 150000 | 149979 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 254000 | 254000 | 254000 |
| *B* | POL, repair of vehicles, tractor and equipments | 220000 | 220000 | 220000 |
| *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) | 25000 | 25000 | 25000 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 386000 | 386000 | 386000 |
| *F* | On Farm Testing (on need based, location specific and newly generated information in the major production systems of the area) | 50000 | 50000 | 49683 |
| *G* | Integrated Farming System | 0 | 0 | 0 |
| *H* | Training of Extension Functionaries | 25000 | 25000 | 25000 |
| *I* | Extension activities | 50000 | 50000 | 49995 |
| *H* | Farmers’ Field School | 30000 | 30000 | 30000 |
| *I* | EDP / Innovative activities | 30000 | 30000 | 30000 |
| *J* | Maintenance of buildings | 50000 | 50000 | 49990 |
| *K* | Establishment of Soil, Plant & Water Testing Laboratory and issue of Soil Health Cards | 25000 | 25000 | 25000 |
| *L* | Farmers’ Conclave & KVK Conference | 0 | 0 | 0 |
| *M* | Video production and HRD | 0 | 0 | 0 |
| *M* | Library Maintenance | 5000 | 5000 | 5000 |
| **TOTAL (A)** | | **16400000** | **16400000** | **16399647** |
| **B. Non-Recurring Contingencies** | |  |  |  |
| 1 | **Works** | 0 | 0 | 0 |
| 2 | **Equipments including SWTL & Furniture** | 0 | 0 | 0 |
| 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)** | | **16400000** | **16400000** | **16399647** |

**15C. Status of revolving fund (Rs. in lakh) for the last three years**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Opening balance as on 1st April** | **Income during the year** | **Expenditure during the year** | **Net balance in hand as on 1st April of each year** |
| April 2016 to March 2017 | 2.275 | 53.619 | 49.807 | 6.087 |
| April 2017 to March2018 | 6.087 | 37.325 | 42.071 | 1.341 |
| April 2018 to March2019 | 1.341 | 28.856 | 24.064 | 6.133 |

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

| **Name of the staff** | **Designation** | Title of the training programme | Institute where attended | Dates |
| --- | --- | --- | --- | --- |
| Dr.L.G.Hiregoudar | Senior Scientist and Head | Millets Seed Production under NFSM Nutri cereals | ICAR-Indian Institute of Millet Research, Hyderabad | 03, July 2018 |
| CSR in agriculture | MANAGE, Hyderabad | October 2018 |
| Mr.S.K.Mudlapur | SMS (Plant Protection) | ASCI Trainers Training Program | GKVK Campus, UAS Bengaluru | 24-26, September 2018 |
| Mr.V.D.Vaikunthe | SMS (Agronomy) | Training on LRI under Sujala-III | NBSS & LUP, Bengaluru | 20 April 2019 |
| Ms. Hemavati Hiregoudar | SMS (Horticulture)I/c | Hi-tech horticulture and Precision farming | UHS, Bagalkot | 09-12, October  2018 |
| Floriculture | ICAR- Directorate of Floricultural Research, Pune | 14-28, November 2018 |
| A Family Approach to Doubling the Farmers Income | UAS, Dharwad | 16 January – 05 February 2019 |
| Drought Proofing Action Plan for Gadag District | UAS, Dharwad | 18-19, February 2019 |
| Managerial skills for effective Extension delivery | UAS, Dharwad. SAMETI (North) | 13-16, March 2019 |
| Mr.S.H.Adapur | SMS (Ag. Extension) | Stake holders meeting on Cashewnut globalisation | DCCD, Cochin at Lalbag, Bengaluru | 12 July 2018 |
| Planning and Development meeting of Shirahatti taluka | Taluka Panchayat, Shirahatti | 21 July 2018 |
| Developing inclusive value chains in Agriculture | NIRD, Hyderabad | 04-07, September 2018 |
| National Seminar on Cashew | Organised by DCCD, Cochin at Vijayawada | 22-23, February 2019 |
| Dr. Sudha V. Mankani | SMS (Home Science) | National Workshop on Promotion of developing climate resilient villages for sustainable food and nutrition security | MANAGE, Hyderabad | 04-10, October 2018 |
| Community Radio Awareness Workshop | International Centre Goa | 21-23, November 2018 |
| Mr.N.H.Bhandi | SMS (Soil Science) | Promotion of developing climate resilient villages for sustainable food and nutritional security | MANAGE, Hyderabad | 04-05, October 2018 |
| Drought Proofing Action Plan for Gadag District | UAS, Dharwad | 18-19, February 2019 |
| Training on LRI under Sujala-III | NBSS & LUP, Bengaluru | 20 April 2019 |
| Dr.B.M.Murgod | Programme Assistant  (Animal Science) | Production and conservation of green fodder for vibrant animal husbandry | UAS, Dharwad | 28-29, June 2018 |
| Technology smart intervention for doubling of farmers' income | NIANP, Bengaluru | 30 July – 08 August, 2018 |
| ASCI Trainers Training Program | GKVK Campus, UAS Bengaluru | 24-26, September 2018 |
| Mrs. Lalita S. Asuti | Programme Assistant  (Computers) | E-Extension in Agriculture | MANAGE, Hyderabad | 17-20, September 2018 |
| Advances in web and mobile application development | NAARM, Hyderabad | 05-10, October 2018 |

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

**(write in detail).**

1. **FARMERS’ FIELD SCHOOL IN BENGALGRAM**

Crop : Bt. Cotton

Title : IPM in Bt. Cotton

No. of sessions : 9

Village : Gojanur

Block : Laxmeshwar

No. of farmers : 25

Farming situation : Rainfed

Season : 2018-19

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Sessions Conducted** | **Date of Programmes Conducted** |
| 1 | Preliminary discussion with farmers regarding FFS , preparation for FFS, soil and water conservation methods etc. | 04-06-2018 |
| 2 | Installation of yellow sticky traps & blue sticky traps for pest management in farmers’ fields | 25-06-2018 |
| 3 | Identification of life cycle of different type of sucking pests and their management | 13-07-2018 |
| 4 | * Installation of phermone traps for identification of pink boll worms * Identification of pink boll worm damaged bolls and their management | 06-08-2018 |
| 5 | Identification and study of life cycle of flower bud maggets and its management during flowering stage of the crop | 20-08-2018 |
| 6 | Identification and study of life cycle of Mirid bug and its management during bolls formation stage | 14-09-2018 |
| 7 | Identification and management of Reddning of leaf, Alternaria leaf spot and Blackarm | 01-10-2018 |
| 8 | Demonstration of Innovative Cotton harvesting bags and feedback from farmers | 01-12-2018 |
| 9 | Conducted Field Day & feedback from farmers | 01-12-2018 |

**Farmers’ learning from FFS**

1. Soil application and foliar spray MgSO4 reduced leaf reddening in ICM field
2. Timely management of sucking pest, flower bud maggots and mirid bug reduced the pest incidence and increased the yield.
3. Farmers gained knowledge about suitable pest & disease management practices
4. **EDP on Primary Processing and marketing of Millet products**

Millets are the important crops grown in Gadag district. Farmers used to sell the un-processed Millets which fetches low price in the market. In addition, they are not aware of the Millet nutrition and value addition of millets. In order to promote the daily consumption of Millets and to get higher returns from the Millets, the EDP on Primary Processing and Marketing of Millets was done.

**Objectives:**

* To get good market price for the processed grains
* To imbibe EDP skills in production & marketing for small farmers
* Cultivation of millets
* To enhance returns from millet cultivation
* To create awareness on millet nutrition, value addition & promote daily consumption of millets

**Activities conducted:**

* FLD on Millets - 20 demonstration in 8 hectares.
* Implemented EDP by taking 3 farmers and farm women.
* 12 trainings to farmers and farm women on crops and millet nutrition.
* 9 trainings to Extension Functionaries on Millet Nutrition.
* 4 value addition trainings.
* Developed brochures & Pamphlets on Millets.
* Exhibitions organised in collaboration with KSDA for promotion and marketing of Millets.
* Initiated Ethnic Food Café for promotion & marketing of Millets.
* EDP on Millets was organized.
* Prepared labels & pamphlets to facilitate marketing of Millets.

**Details of EDP on Primary and Secondary Processing & Marketing of Millets :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the farmer** | **Place** | **Name of value added product** | **Date of initiation of sales** | **Sale upto 31-03-2019** |
| Shri Nagappa Halli | Hulkoti | Foxtail Millet, Little Millet, Browntop Millet and Finger Millet | 28-01-2019 | 2.5 Qtls |
| Shri Namaraddi Hombal | Madolli | Foxtail Millet, Little Millet and Finger Millet | 28-01-2019 | 2.0 Qtls |
| Smt Saroja Hosamani | Hulkoti | Ragi, Papad, Muruku, Biscuits and Holigae | 28-01-2019 | 1.0 Qtls |

**Results of EDP on Primary and Secondary Processing & Marketing of Millets :**

