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| C:\Documents and Settings\coh\My Documents\UHS_LOGO-3.jpg | **UNIVERSITY OF HORTICULTURAL SCIENCES,**  **BAGALKOT** | http://www.icar.org.in/files/icarlogo.jpg |

**ANNUAL PROGRESS REPORT**

ICAR- KRISHI VIGYAN KENDRA

NH-75, TAMAKA, KOLAR

KARNATAKA

ICAR-KRISHI VIGYAN KENDRA

KOLAR (KARNATAKA)

**(JANUARY 2021 TO DECEMBER 2021)**

|  |  |  |  |
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| **E:\All photos-2021-22\KVK building inaguration-22.10.2021\madam shobha karandlaje function\HDS_0726.JPG** | **E:\All photos-2021-22\KVK building inaguration-22.10.2021\WhatsApp Image 2021-10-27 at 11.50.56 AM (1).jpeg** | **E:\All photos-2021-22\KVK building inaguration-22.10.2021\madam shobha karandlaje function\HDS_0845.JPG** | **E:\All photos-2021-22\DAESI Certi distri-24.7.2021\DSC_0037.JPG** |
| **E:\All photos-2021-22\On campus trgs\09.08.2021\DSC_0049.JPG** | **E:\All photos-2021-22\Pre vibrant-Gujarat summit-2021\16.12.2021\selected\DSC_0044.JPG** | **G:\20210316_085115.jpg** | **E:\All photos-2021-22\ADG-Dr. Bhaskar visit-16.7.2021\DSC_0018.JPG** |
| **H:\Last -sudha-system-hp-v192\All Photos2020-21\VC and DE Visit 15.03.2021 and 16.03.2021\Pooja of New KVK Building\20210315_105928.jpg** | **E:\All photos-2021-22\On campus trgs\3&4.1.2022\DSC_0011.JPG** | **E:\All photos-2021-22\On campus trgs\8.10.2021-Horti\DSC_0120.JPG** | **E:\All photos-2021-22\On campus trgs\Home science\Poshan Abhiyana-30.9.2021\DSC_0081.JPG** |
| **E:\All photos-2021-22\Offcampus training programmes\SCSP-16.7.2021\Report\DSC_0037.JPG** | **E:\All photos-2021-22\Diagnostic field vist\Coriander-1.7.2021\WhatsApp Image 2021-07-13 at 9.41.28 AM (2).jpeg** | **E:\All photos-2021-22\Field visits\16.6.2021\DSC_0091.JPG** | **E:\All photos-2021-22\Field visits\21.6.2021\DSC_0117.JPG** |

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PART I – GENERALINFORMATION ABOUT THE KVK

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| KVK Address | Telephone | | E mail | Web Address |
| Krishi Vigyan Kendra, N.H-75, Tamaka, kolar-563103 | Office:08152-295098, 9480696395 | Fax: 08152-295098 | [kvk.Kolar@icar.gov.in](mailto:kvk.Kolar@icar.gov.in)  kvkkolar2012@gmail.com | [www.kvkkolar.in](http://www.kvkkolar.in) |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Address | Telephone | | E mail | Web Address |
| Office | Fax |  |  |
| University of Horticultural Sciences, Udyanagiri , Bagalkot-587104 | 8354-230351 | 08354 – 230364 | vc@uhsbagalkot.edu.in  de@uhsbagalkot.edu.in | www.uhsbagalkot.edu.in |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Telephone / Contact | | |
|  | Residence | Mobile | Email |
| K. Thulasiram | 9448633234 | 9480696395 | thulasiram\_1968@yahoo.co.in |

1.4. Year of sanction:

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No. | Sanctioned post | Name of the incumbent | Designation | M/F | Discipline | Highest Qualification  (for PC, SMS and Prog. Asstt.) | Pay  Scale | Basic pay | Date of joining KVK | Permanent  /Temporary | Category (SC/ST/  OBC/  Others) |
| 1 | Head/Senior Scientist | Mr. K.Thulasiram | Senior Scientist & Head | M | Entomology | M.Sc.  (Agri.) | 131400-217100 | 166400 | 26/12/2012 | Permanent | Others |
| 2 | Scientist/SMS | Dr. Anil Kumar, S | Scientist | M | Soil Science | Ph.D | 68,900-2,05,500 | 89,900 | 030/8/2019 | Permanent | Others |
| 3 | Scientist/SMS | Dr. Jyothi Kattegoudar | Scientist | M | Horticulture | Ph.D | 68,900-2,05,500 | 79,900 | 18/06/2020 | Permanent | Others |
| 4 | Scientist/SMS | Dr. Ambika D.S | Scientist | F | Plant protection | Ph.D | 68,900-2,05,500 | 84,800 | 26/06/2019 | Permanent | Others |
| 5 | Scientist/SMS | Dr. Shashidhar K.R. | Scientist | M | Sericulture | Ph.D | 68,900-2,05,500 | 84,800 | 17/01/2014 | Permanent | SC |
| 6 | Scientist/SMS | Dr. Chikkanna G.S. | Scientist | M | Home Science | Ph.D | 68,900-2,05,500 | 73,100 | 22/06/2016 | Permanent | Others |
| 7 | Scientist/SMS | Mrs. Swathi G.R | SMS | F | Agrometeor  ology | M.Sc  (Agri.) | 56,100 | 56,100 | 04.11/2019 | Temporary | Others |
| 8 | Scientist/SMS | Vacant | | | | | | | | | |
| 9 | Programme Assistant  ( Lab Tech.) | Vacant | | | | | | | | | |
| 10 | Programme Assistant (Computer) | Mrs. C.S. Gnanasudha | Technical Officer (Comp) | F | - | MCA | 35,400-1,12,400 | 44,900 | 27/01/2014 | Permanent | SC |
| 11 | Programme Assistant/ Farm Manager | Mr. Umesha Naik | Technical Officer  Farm Manager | M | - | M.Sc.  (Agri.) | 35,400-1,12,400 | 44,900 | 01/03/2014 | Permanent | ST |
| 12 | Assistant | Mrs. Shruthi.K. | Assistant | F | - | B.Com | 30350-58250 | 35,150 | 03/09/2021 | Permanent | Others |
| 13 | Jr. Stenographer | Mrs. Savitri Rudrapur | Steno | F | - | M.Com | 37900-70850 | 44,200 | 12/03/2014 | Permanent | Others |
| 14 | Driver - 1 | Mr. Pradeep | Driver | M | - | IX class | - | 13,340 | 01/08/2014 | Temporary | SC |
| 15 | Driver - 2 | Vacant | - | M | - | - | - |  | - | - | - |
| 16 | SS-1 | Mr. Srinath | SS | M | - | PUC |  | 12,128 | 02/01/2017 | Temporary | SC |
| 17 | SS-2 |  |  |  |  |  |  |  |  |  |  |

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

|  |  |  |
| --- | --- | --- |
| S. No. | Item | Area (ha) |
| 1 | Under Buildings | 550 m2 |
| 2. | Under Demonstration Units | 0.06 |
| 3. | Under Crops | 1.12 |
| 4. | Orchard/Agro-forestry | 2.0 |
| 5. | Others | 12.82 |

**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 | March, 2021 | 550 m2 | 155.56 | - | - | - |
| 2. | Farmers Hostel |  | - | - | - | - | - | - |
| 3. | Staff Quarters |  | - | - | - | - | - | - |
|  | 1 |  | - | - | - | - | - | - |
|  | 2 |  | - | - | - | - | - | - |
|  | 3 |  | - | - | - | - | - | - |
|  | 4 |  | - | - | - | - | - | - |
|  | 5 |  | - | - | - | - | - | - |
|  | 6 |  | - | - | - | - | - | - |
| 4. | Demonstration Units |  |  |  |  |  |  |  |
|  | 1. Farm pond | GOK | - | 15x15x9 m | 2,50,000 |  |  |  |
|  | 2 . Curry leaf block | ICAR | - | 100 | - |  |  |  |
|  | 3.Low cost poly house 1 | ICAR | - | 216 | 3,68,185 |  |  |  |
|  | 4.Poly tunnels 4 | ICAR | - | 400 |  |  |  |  |
|  | 5.Jackfruit processing unit | ICAR | - | 10 | 3,95,265 |  |  |  |
|  | 6.Hydroponic fodder unit | ICAR | - | 4x2 sq.ft | 30000 |  |  |  |
| 5 | Fencing |  | - | - | - | - | - | - |
| 6 | Rain Water harvesting system |  | - | - | - | - | - | - |
| 7 | Threshing floor |  | - | - | - | - | - | - |
| 8 | Farm Go down |  | - | - | - | - | - | - |
| 9 |  |  | - | - | - | - | - | - |
| 10 |  |  | - | - | - | - | - | - |

B) Vehicles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of vehicle** | **Year of purchase** | **Cost (Rs.)** | **Total kms. Run** | **Present status** |
| Bolero ZLX ( Four Wheeler) | 12/06/2014 | 663706 | 163254 | Running |
| Hero splendor (Two Wheeler) | 12/05/2013 | 54600 | 20539 | Running |
| Honda Activa (Two Wheeler) | 31/12/2013 | 61345 | 22417 | Running |

**C) Lab equipment & AV aids**

| **Name of the equipment** | **Year of purchase** | **Quantity (No.)** | **Cost (Rs.)** | **Present status** |
| --- | --- | --- | --- | --- |
| Vegetable preservator | 2014 | 1 | 3000 | Good |
| Sealing machine | 2014 | 1 | 1700 | Good |
| Gas cylinder and stove | 2014 | 1 | 5857 | Good |
| Mixer and juicer | 2014 | 1 | 4200 | Good |
| Micro Oven | 2014 | 1 | 5800 | Good |
| Pressure cooker | 2014 | 1 | 1400 | Good |
| Electronic balance (6 kg) | 2016 | 1 | 6646 | Good |
| Weighing balance (60 kg) | 2016 | 1 | 9495 | Good |
| Vegetable Handy Planter | 2016 | 1 | 2000 | Good |
| Branded Heavy duty load bearing cabinet (Steel Almirah) | 2016 | 3 | 14470 | Good |
| Branded carware brand caned seating ('S' type full arm chair) | 2016 | 6 | 2445 | Good |
| Knock down Type seating (Wooden peacock chair) | 2016 | 5 | 4567 | Good |
| Branded Indexed Cabinet 4 Drawer filing cabinet with 100 CFF(Filing cabinet) | 2016 | 1 | 17458 | Good |
| Branded officers Desk (T-9 Table) with 18 mm PLB Top | 2016 | 6 | 12033 | Good |
| Jack Fruit Chips machine | 2016 | 1 | 8800 | Good |
| Nikon D5300 (with free gb card + carry case +HDMI cable) | 2016 | 1 | 34800 | Good |
| Sealing Machine | 2017 | 1 | 1000 | Good |
| ISI A„"Taypcerana Bee hive Box | 2017 | 8 | 17600 | Good |
| Branded 12 Pigeons Wooden magazine display cabinet | 2017 | 1 | 24390 | Good |
| Steel Book case | 2017 | 1 | 14470 | Good |
| Branded officers steel table | 2017 | 4 | 11877 | Good |
| Dell Desktop system | 2017 | 1 | 36500 | Good |
| Canon Printer LBP 2900 | 2017 | 1 | 7800 | Good |
| Hydroponic system unit(1)( 72 tray) | 2017 | 1 | 30000 | Good |
| Soil sampling Augur set | 2017 | 1 | 19980 | Good |
| Executive Revolving chair | 2017 | 1 | 12159 | Good |
| Executive table | 2017 | 1 | 16299 | Good |
| Officers Revolving chair | 2017 | 7 | 58212 | Good |
| Pulp boiling machine | 2017 | 1 | 94447 | Good |
| Conventional pulp making machine | 2017 | 1 | 54500 | Good |
| Pulp making machine all contact parts made of food grade 304 SSsteel | 2017 | 1 | 31700 | Good |
| Digital Hand held refractometer for invert sugar | 2017 | 1 | 27000 | Good |
| Digital PH meter make: systronics india Mode 335 | 2017 | 1 | 14500 | Good |
| Racks 6 ft (8 Angle & 6 Plates) | 2017 | 2 | 3600 | Good |
| Toshiba e -studio xerox machine | 2017 | 1 | 86000 | Good |
| Acer Desktop Computer | 2017 | 2 | 99900 | Good |
| Mridaparikshak soil testing Kit(Mini lab) | 2017 | 1 | 86000 | Good |
| Logitech webcam | 2017 | 1 | 900 | Good |
| Logitech R400 Presenter | 2017 | 1 | 3120 | Good |
| Logitech Mouse wireless | 2017 | 1 | 700 | Good |
| Flame photometer | 2017 | 1 | 73758 | Good |
| Hand operated cocoon deflossing machine | 2017 | 2 | 8000 | Good |
| Water bath circulator | 2017 | 1 | 88500 | Good |
| Analytical Balance | 2017 | 1 | 67850 | Good |
| EC meter | 2017 | 1 | 98530 | Good |
| Kjeldahl apparatus | 2017 | 1 | 215800 | Good |
| AAS unit | 2017 | 1 | 1489000 | Good |
| Double distillation unit | 2017 | 1 | 167000 | Good |
| CC Camera | 2017 | 1 | 34700 | Good |
| Desk top | 2017 | 1 | 47800 | Good |
| All in one Printer | 2017 | 1 | 18000 | Good |
| Epson LCD Projector | 2018 | 1 | 44000 | Good |
| Mango Ripening chamber | 2019 | 1 | 10620 | Good |
| Solar LED insect light trap | 2019 | 1 | 3780 | Good |
| Hydraulic Juice(KSDH) | 2019 | 1 | 94,000 | Good |
| Amla shredding machine(KSDH) | 2019 | 1 | 72,000 | Good |
| Boiled amla shredding | 2019 | 1 | 72200 | Good |
| Officers table both side 3 drawers of size(IMD) | 2019 | 2 | 24120 | Good |
| S type full A/c chair(IMD) | 2019 | 2 | 5220 | Good |
| Heavy guage steel plain almirah | 2019 | 1 | 15039 | Good |
| Laptop(Dell) | 2020 | 1 | 44500 | Good |
| Desktop(Dell) | 2020 | 1 | 35600 | Good |
| Hard Disk | 2020 | 1 | 7434 | Good |
| Neel kamal chairs | 2020 | 6 | 3000 | Good |
| Essae electronic scale | 2020 | 1 | 6301 | Good |
| Hard disk | 2020 | 1 | 7434 | Good |
| HP 200G4 All in one system | 2021 | 1 | 46000 | Good |
| HP Laser jest printer | 2021 | 1 | 11900 | Good |
| KEMI water bath Model:KWB-220 | 2021 | 1 | 17600 | Good |
| KEMI Magnetic strirrer | 2021 | 1 | 7900 | Good |
| KEMI strirrer | 2021 | 1 | 7600 | Good |
| PH meter 3 point | 2021 | 1 | 13500 | Good |
| KEMI Heating mantle | 2021 | 1 | 6200 | Good |
| KEMI Hot plate-Rectangular | 2021 | 1 | 13600 | Good |
| Printer HP Laserjet | 2021 | 1 | 20000 | Good |
| UV visible spectometer | 2021 | 1 | 99750 | Good |
| KEMI fume cupboard | 2021 | 1 | 99750 | Good |
| KEMI orbital shaker | 2021 | 1 | 73500 | Good |
| KEMI hot air oven | 2021 | 1 | 40100 | Good |
| KEMI muffle furnace 900 Degree Digital | 2021 | 1 | 41800 | Good |
| 65 AH Battery make Exide | 2021 | 16 | 83200 | Good |
| 6 KVA online UPS make Microtech | 2021 | 1 | 42469 | Good |
| Battery stand | 2021 | 1 | 2542 | Good |
| Water tank with chilling blue star | 2021 | 1 | 32203 | Good |
| Aquafresh 25 LPH commercial water purifier | 2021 | 1 | 15254 | Good |
| Ahuja podium WSL-2500 –R 40 watts PA amplifier set with MIC | 2021 | 1 | 31800 | Good |
| Projector view sonic MI portable smart | 2021 | 1 | 62592 | Good |
| Chair (visitor chair with steel finish) | 2021 | 11 | 12100 | Good |
| Chair(with cushion & wooden writing pad) | 2021 | 20 | 72500 | Good |
| Projector screen (LCD) | 2021 | 1 | 9152 | Good |
| Printer Laserjet | 2021 | 1 | 8000 | Good |
| Samsung refrigerator (324 ltr convertible) | 2021 | 2 | 59322 | Good |
| Samsung Refrigerator(336 ltr convertible) | 2021 | 1 | 31780 | Good |

**D) Farm equipment and implements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of the equipment/implement | Year of purchase | Quantity (No.) | Cost (Rs.) | Present status |
|  |  |  |  |  |

**1.8. Details of SAC meeting organized**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Number of Participants | Salient Recommendations | Action taken | Remarks, if any |
| 21.01.2022 | 25 |  |  |  |

|  |  |  |
| --- | --- | --- |
| **C.£ÀA** | **¸À®ºÉ ¤ÃrzÀªÀgÀÄ** | **¸À®ºÉUÀ¼ÀÄ** |
| **1.** | qÁ. PÉ.JA. EA¢gÉÃ±ï UËgÀªÁ¤évÀ PÀÄ®¥ÀwUÀ¼ÀÄ, vÉÆÃlUÁjPÉ «eÁÕ£ÀUÀ¼À «±Àé«zÁå®AiÀÄ, ¨ÁUÀ®PÉÆÃmÉ | 1. PÉÆÃ¯ÁgÀ f¯ÉèAiÀÄ°è mÉÆªÀiÁåmÉÆ ºÉZÁÑV ¨É¼ÉAiÀÄÄwÛzÀÄÝ ªÀiÁgÀÄPÀmÉÖAiÀÄ ªÀ»ªÁlÄ CjvÀÄ mÉÆªÀiÁåmÉÆ ¨É¯ÉAiÀÄ ¸ÀjAiÀiÁzÀ ªÀiÁ»wAiÀÄ£ÀÄß gÉÊvÀjUÉ vÀ®Ä¦¸ÀÄªÀÅzÀÄ. 2. £Áå£ÉÆÃ AiÀÄÆjAiÀiÁ §¼À¸ÀÄªÀÅzÀgÀ ªÀÄÄSÁAvÀgÀ ¨ÉÃ¸ÁAiÀÄzÀ ªÉZÀÑ vÀUÀÎ°gÀÄªÀÅzÀjAzÀ gÉÊvÀjUÉ EzÀgÀ CjªÀÅ ªÀÄÆr¸ÀÄªÀÅzÀÄ. 3. ºÉÆ¼À°AiÀÄ°è PÀÈ¶ «eÁÕ£À PÉÃAzÀæPÉÌ ºÉÆ¸ÀzÁV ¤ÃrgÀÄªÀ d«Ä¤Ã£À°è £ÀÄUÉÎ ºÁUÀÆ ¸ÀéAiÀÄA ¥ÀgÁUÀ¸Àà±Àð ¸ÀÄzsÁjvÀ vÀgÀPÁjUÀ¼À ©ÃdUÀ¼À£ÀÄß GvÁàzÀ£É ªÀiÁqÀÄªÀÅzÀÄ. £À¸Àðj GvÁàzÀ£ÉUÉ ºÉaÑ£À DzÀåvÉ ¤ÃqÀÄªÀÅzÀÄ. 4. £ÀÄUÉÎAiÀÄÄ §ºÀÄªÁ¶ðPÀ ¨É¼ÉAiÀiÁVzÀÄÝ, EzÀ£ÀÄß ºÉaÑUÉ ¨É¼ÉAiÀÄ®Ä gÉÊvÀjUÉ ¥ÀæZÁgÀ ªÀiÁqÀÄªÀÅzÀÄ. 5. D®ÆUÀqÉØ CAUÁA±À PÀÄr ¥ÁævÉåQëPÉUÀ¼À£ÀÄß ºÀ«ÄäPÉÆ¼ÀÄîªÀÅzÀÄ. 6. PÀÈ¶ «eÁÕ£À PÉÃAzÀæzÀ PÉëÃvÀæzÀ°è **‘¸ÀªÀÄUÀæ PÀÈ¶ ¥ÀzÀÞw’**AiÀÄ ¥ÁævÉåQëPÉUÀ¼À£ÀÄß PÀqÁØAiÀÄªÁV C¼ÀªÀr¹PÉÆ¼ÀÄîªÀÅzÀÄ. |
| **2.** | qÁ. J¸ï.L. CxÀtÂ  «¸ÀÛgÀuÁ ¤zÉÃð±ÀPÀgÀÄ, vÉÆÃlUÁjPÉ «eÁÕ£ÀUÀ¼À «±Àé«zÁå®AiÀÄ, ¨ÁUÀ®PÉÆÃmÉ | 1. ºÉÆ¼À° PÉëÃvÀæzÀ°è 30 JPÀgÉ ¨sÀÆ«ÄAiÀÄ£ÀÄß ªÀiÁzÀj vÁPÀÄUÀ¼ÁV ªÀiÁqÀÄªÀÅzÀÄ ªÀÄvÀÄÛ ¸ÀªÀÄUÀæ PÀÈ¶ ¥ÀzÀÞwAiÀÄ ªÀiÁzÀj WÀlPÀªÀ£ÀÄß C©üªÀÈ¢Þ¥Àr¸ÀÄªÀÅzÀÄ. 2. G¥ÀPÀ¸À§ÄUÀ¼ÁzÀ ºÉÊ£ÀÄUÁjPÉ, ªÀiË®åªÀzsÀð£É, PÉÆAiÉÆèvÀÛgÀ vÀAvÀæeÁÕ£ÀUÀ¼À §UÉÎ ºÉaÑ£À UÀªÀÄ£À ºÀj¸ÀÄªÀÅzÀÄ. 3. ‘**MAzÀÄ f¯Éè MAzÀÄ ¨É¼**É’ GvÀà£ÀßPÉÌ ºÉaÑ£À DzÀåvÉ ¤Ãr ºÉaÑ£À PÁAiÀÄðPÀæªÀÄUÀ¼À£ÀÄß ºÀ«ÄäPÉÆ¼ÀÄîªÀÅzÀÄ. |
| **3.** | qÁ. PÉ. wªÀÄä¥Àà,  ¥ÀæzsÁ£À «eÁÕ¤ ºÁUÀÆ £ÉÆÃqÀ¯ï D¦üÃ¸Àgï, PÀÈ¶ vÀAvÀæeÁÕ£À C¼ÀªÀrPÉ ¸ÀA±ÉÆÃzsÀ£À ¸ÀA¸ÉÜ,  ªÀ®AiÀÄ-11, ¨ÉAUÀ¼ÀÆgÀÄ | 1. gÉÊvÀjAzÀ ªÉÃ¸ïÖ rÃPÀA¥ÉÆÃ¸Àgï£À §¼ÀPÉAiÀÄ C©ü¥ÁæAiÀÄªÀ£ÀÄß ¥ÀqÉzÀÄ ªÀgÀ¢AiÀÄ£ÀÄß ¸ÀAUÀæ»¸ÀÄªÀÅzÀÄ. 2. gÉÊvÀgÀ DzÁAiÀÄ ¢éUÀÄtUÉÆ½¸ÀÄ«PÉAiÀÄ PÀÄjvÀÄ PÉ«PÉAiÀÄ AiÀÄ±ÉÆÃUÁxÉUÀ¼À «rAiÉÆÃUÀ¼À£ÀÄß zÁR°¸ÀÄªÀÅzÀÄ. 3. ¥Ë¶×PÀ PÉÊvÉÆÃlzÀ°è £ÀÄUÉÎ ªÀÄvÀÄÛ ºÀtÂÚ£À ¨É¼ÉUÀ¼À£ÀÄß ¸ÉÃj¹PÉÆ¼ÀÄîªÀÅzÀÄ. 4. £ÉÊ¸ÀVðPÀ PÀÈ¶ ªÀÄvÀÄÛ ¸ÁªÀAiÀÄªÀ PÀÈ¶UÉ ºÉaÑ£À DzÀåvÉ ¤ÃqÀ®Ä ¸ÀÆa¹zÀÄÝ, «¸ÀÛgÀuÁ ¤zÉÃð±ÀPÀgÉÆA¢UÉ ¸ÀªÀiÁ¯ÉÆÃZÀ£ÉAiÀÄ£ÀÄß £ÀqÉ¹ EªÀÅUÀ¼À£ÀÄß ¥ÁævÉåQëPÉUÀ¼À°è PÉÊUÉÆ¼ÀÄîªÀÅzÀÄ. |
| **4.** | qÁ. J£ï. zÉÃªÀPÀÄªÀiÁgï  «¸ÀÛgÀuÁ ¤zÉÃð±ÀPÀgÀÄ,  PÀÈ¶ «±Àé«zÁå¤®AiÀÄ, ¨ÉAUÀ¼ÀÆgÀÄ | 1. eÉÊ«PÀ ¦ÃqÉ£Á±ÀPÀUÀ¼ÀÄ ºÁUÀÆ ¸ÁªÀAiÀÄªÀ UÉÆ§âgÀUÀ¼À ¥ÁævÉåQëPÉ ªÀÄvÀÄÛ ºÀ«ÄäPÉÆAqÀ vÀgÀ¨ÉÃwUÀ¼À £ÀAvÀgÀ JµÀÄÖ d£À gÉÊvÀgÀÄ C¼ÀªÀr¹PÉÆArzÁÝgÉ ªÀÄvÀÄÛ CªÀgÀ C£ÀÄ¨sÀªÀUÀ¼À PÀÄjvÀÄ CzsÀåAiÀÄ£À ªÀiÁqÀÄªÀÅzÀÄ. 2. UÉÆÃqÀA© ¨É¼ÉAiÀÄ°è ªÀiÁªÀÅ ¸ÉàÃµÀ¯ï GvÀà£ÀßzÀ G¥ÀAiÉÆÃUÀUÀ¼ÀÄ ªÀÄvÀÄÛ ±ÉÃPÀqÁªÁgÀÄ E¼ÀÄªÀj ºÉZÀÑ¼À PÀÄjvÀÄ w½¸ÀÄªÀÅzÀÄ. 3. CeÉÆÃ¯Á vÀAiÀiÁjPÉAiÀÄ°è gÉÊvÀgÀ C£ÀÄ¨sÀªÀUÀ¼À£ÀÄß zÁR°¸À®Ä w½¹zÀgÀÄ. 4. vÁ®ÆèPÀÄªÁgÀÄ ««zsÀ ¨É¼ÉUÀ¼À°è ªÀÄtÂÚ£À°ègÀÄªÀ ¥ÉÆÃµÀPÁA±ÀUÀ¼À PÉÆgÀvÉAiÀÄ£ÀÄß UÀÄgÀÄw¹ CªÀÅUÀ¼À ¸ÀÆPÀÛ ¤ªÀðºÀuÉAiÀÄ §UÉÎ gÉÊvÀjUÉ w¼ÀÄªÀ½PÉ ¤ÃqÀÄªÀÅzÀÄ. 5. mÉÆªÀiÁåmÉÆ ªÀÄvÀÄÛ qÉÆtÚªÉÄt¹£ÀPÁ¬Ä ¨É¼ÉUÀ¼À°è gÉÊvÀgÀÄ ªÀiÁqÀÄwÛgÀÄªÀ gÀ¸ÁªÀj (¥sÀnðUÉÃµÀ£ï) ¥ÀzÀÞwAiÀÄ£ÀÄß CzsÀÀåAiÀÄ£À ªÀiÁr AiÀiÁªÀ ¥ÉÆÃµÀPÁA±ÀUÀ¼À£ÀÄß §¼À¸ÀÄwÛgÀÄªÀ §UÉÎ zÁR°¸ÀÄªÀÅzÀÄ. 6. »¥ÀÄà£ÉÃgÀ¼É ªÀÄgÀ¥ÀzÀÝwAiÀÄ°è CAvÀgÀ ¨ÉÃ¸ÁAiÀÄ, ¥ÉÆÃµÀPÁA±ÀUÀ¼À ¤ªÀðºÀuÉ, PÁAqÀ ¸ÀªÀgÀÄ«PÉ ªÀÄvÀÄÛ DPÁgÀ ¤ÃqÀÄªÀ §UÉÎ gÉÊvÀjUÉ ªÀiÁ»w ¤ÃqÀÄªÀÅzÀÄ. 7. ªÉÄÃªÀÅ ¨É¼ÉUÀ¼À ¥ÁævÉåQëPÉ ¸ÀAUÀæºÁ®AiÀÄªÀ£ÀÄß PÉ«PÉ PÉëÃvÀæzÀ°è C¼ÀªÀr¹PÉÆ¼ÀÄîªÀÅzÀÄ. 8. ¸ÀÄqÉÆªÉÆ£Á¸ï, mÉæöÊPÉÆÃqÀªÀiÁð ªÀÄvÀÄÛ ªÉÃ¸ïÖ rÃPÀA¥ÉÆÃ¸ÀgïUÀ¼À£ÀÄß §¼ÀPÉ ªÀiÁrPÉÆAqÀÄ ºÉaÑ£À ¥ÁævÉåQëPÉUÀ¼À£ÀÄß ºÀ«ÄäPÉÆ¼ÀÄîªÀÅzÀÄ. 9. mÉÆªÀiÁåmÉÆ ªÀÄvÀÄÛ ªÀiÁ«£À°è ºÀtÂÚ£À £ÉÆt ¤ªÀðºÀuÉAiÀÄ°è ªÉÆÃºÀPÀ §¯ÉUÀ¼ÀÀ£ÀÄß §¼À¸ÀÄªÀ PÀÄjvÀÄ gÉÊvÀjUÉ ºÉaÑ£À CjªÀÅ ªÀÄÆr¸ÀÄªÀÅzÀÄ. 10. ««zsÀ PÀÈ¶ ¨É¼ÉUÀ¼À°è £Áå£ÉÆÃ UÉÆ§âgÀzÀ §¼ÀPÉUÉ DzÀåvÉ ¤ÃqÀÄªÀÅzÀÄ. 11. »¥ÀÄà£ÉÃgÀ¼ÉAiÀÄ°è yæÃ¥ïì ºÁUÀÆ ªÉÄÊmïì £ÀÄ¹ ºÁªÀ½ PÀÄjvÀÄ PÉëÃvÀæ ªÀÄgÀÄ¥Àj²Ã®£É ªÀÄÄAzÀÄªÀgÉ¸ÀÄªÀÅzÀÄ. 12. PÉ«PÉAiÀÄ°è PË±À¯Áå©üªÀÈ¢Þ vÀgÀ¨ÉÃwAiÀÄ£ÀÄß ¥ÀqÉzÀ vÀgÀ¨ÉÃwzÁgÀgÀ AiÀÄ±ÉÆÃUÁxÉAiÀÄ£ÀÄß vÀAiÀiÁj¸ÀÄªÀÅzÀÄ, CªÀgÀ£ÀÄß ¸ÀA¥À£ÀÆä® ªÀåQÛUÀ¼ÁV vÀgÀ¨ÉÃwUÀ½UÉ DºÁé¤¸ÀÄªÀÅzÀÄ. |
| **5.** | qÁ. ªÉAPÀlPÀÄªÀiÁgï,  ¤zÉÃð±ÀPÀgÀÄ, ¨sÁgÀwÃAiÀÄ vÉÆÃlUÁjPÉ ¸ÀA±ÉÆÃzsÀ£Á ¸ÀA¸ÉÜ, ºÉ¸ÀgÀWÀlÖ, ¨ÉAUÀ¼ÀÆgÀÄ | 1. PÉA¥ÀÄ FgÀÄ½îAiÀÄ vÀ½AiÀiÁzÀ CPÁð ©AzÀÄ«£À ªÀÄÄAZÀÆtÂ ¥ÁævÉåQëPÉAiÀÄ°è vÀgÀPÁj ¸ÉàÃµÀ¯ï£ÀÄß §¼À¸ÀÄªÀÅzÀÄ. 2. J¯ÉPÉÆÃ¸ÀÄ ¨É¼ÉAiÀÄ°è ¸ÀªÀÄUÀæ QÃl ¤ªÀðºÀuÉAiÀÄ°è ¨ÉÃ«£À ©ÃdzÀ ªÀiÁvÉæUÀ¼À£ÀÄß G¥ÀAiÉÆÃV¸À®Ä gÉÊvÀjUÉ vÀgÀ¨ÉÃwUÀ¼À°è ªÀiÁ»w ¤ÃqÀÄªÀÅzÀÄ. 3. »gÉÃPÁ¬ÄAiÀÄ°è CPÀð ¥Àæ¸À£Àß vÀ½, ¥ÉÆÃ¯ï ©Ã£ïì£À°è CPÀð ¸ÀÄPÉÆÃªÀÄ¯ï vÀ½AiÀÄ£ÀÄß gÉÊvÀjUÉ ¥ÀjZÀ¬Ä¸À®Ä w½¹zÀgÀÄ. |
| 6. | qÁ. ªÀÄÆqÀ®VjAiÀÄ¥Àà, ¥ÀæzsÁ£À «eÁÕ¤, r.J¯ï.J.¦, PÀÈ¶ «±Àé«zÁå¤®AiÀÄ, ¨ÉAUÀ¼ÀÆgÀÄ | 1. PÀÈ¶ «±Àé«zÁå¤®AiÀÄ, ¨ÉAUÀ¼ÀÆj£ÀªÀgÀÄ C©üªÀÈ¢Þ¥Àr¹zÀ mÁæöåPÀÖgï ZÁ°vÀ ©Ãd ªÀÄvÀÄÛ UÉÆ§âgÀzÀ PÀÆjVAiÀÄ£ÀÄß RjÃ¢¹, gÉÊvÀjUÉ ¥ÀzÀÞw ¥ÁævÉåQëPÉAiÀÄ£ÀÄß ºÀ«ÄäPÉÆ¼ÀÄîªÀÅzÀÄ. |
| 7. | qÁ. N.Dgï. £ÀlgÁdÄ, ¥ÁæzsÁå¥ÀPÀgÀÄ ªÀÄvÀÄÛ «±Àé«zÁå®AiÀÄzÀ ªÀÄÄRå¸ÀÜgÀÄ (¥ÁætÂ «eÁÕ£À)M¼À£Ár£À «ÄÃ£ÀÄUÁjPÉ WÀlPÀ, ¨ÉAUÀ¼ÀÆgÀÄ | 1. gÀ¸ÀªÉÄÃªÀÅ, CeÉÆÃ¯Áè, ªÉÄÃ«£À ¨É¼ÉUÀ¼À ¸ÀAUÁæºÀ®AiÀÄ ¥ÁævÉåQëPÉUÀ¼À£ÀÄß ¸ÀªÀÄUÀæªÁV MAzÉÃ ¥ÁævÉåQëPÉAiÀÄ°è gÉÊvÀjUÉ ¥ÁævÉåQëPÉ ªÀiÁqÀ®Ä QæÃAiÀiÁ AiÉÆÃd£ÉAiÀÄ°è ¸ÉÃj¸ÀÄªÀÅzÀÄ. |
| 8. | ²æÃªÀÄw gÀÆ¥ÁzÉÃ«  dAn ¤zÉÃð±ÀPÀgÀÄ, PÀÈ¶ E¯ÁSÉ, PÉÆÃ¯ÁgÀ ªÀivÀÄÛ AiÉÆÃd£Á ¤zÉÃð±ÀPÀgÀÄ (DvÀä) | 1. gÁV ¨É¼ÉAiÀÄ£ÀÄß ¸Á®Ä¥ÀzÀÞwAiÀÄ°è ¨É¼ÉAiÀÄÄªÀ vÁAwæPÀvÉAiÀÄ£ÀÄß gÉÊvÀjUÉ ¥ÁævÉåQëPÉUÀ¼À ªÀÄÆ®PÀ ¥ÀæZÁgÀUÉÆ½¸ÀÄªÀÅzÀÄ. 2. eÉÊ«PÀ UÉÆ§âgÀUÀ¼À£ÀÄß ºÉZÁÑV §¼ÀPÉ ªÀiÁqÀ®Ä gÉÊvÀjUÉ CjªÀÅ ªÀÄÆr¸ÀÄªÀÅzÀÄ. |
| 9. | ²æÃªÀÄw UÁ¬Äwæ JA,  G¥À ¤zÉÃð±ÀPÀgÀÄ, vÉÆÃlUÁjPÉ E¯ÁSÉ, f.¥ÀA, PÉÆÃ¯ÁgÀ | 1. f¯ÉèAiÀÄ ¥ÀæªÀÄÄR 5 ¨É¼ÉUÀ¼À PÀÈ¶ ªÀiÁgÀÄPÀmÉÖ zÀgÀªÀ£ÀÄß J¸ï.JªÀiï.J¸ï. ªÀÄÆ®PÀ gÉÊvÀjUÉ ªÀiÁ»w ¤ÃqÀÄªÀÅzÀÄ. 2. ªÀÄÄA§gÀÄªÀ ªÀµÀðzÀ°è PÀ¹ PÀlÄÖªÀ vÀgÀPÁj ¸À¹UÀ¼ÁzÀ mÉÆªÀiÁåmÉÆ, ªÀÄvÀÄÛ §zÀ£É PÀÄjvÀÄ ¥ÁævÉåQëPÉ PÉÊUÉÆ¼Àî¨ÉÃPÉAzÀÄ w½¹zÀgÀÄ. 3. eÉÊ«PÀ ¦ÃqÉ £Á±ÀPÀUÀ¼À GvÁàzÀ£ÉUÉ ¸ÀA§A¢ü¹zÀAvÉ gÁ¶ÖçÃAiÀÄ vÉÆÃlUÁjPÁ «ÄµÀ£ï CrAiÀÄ°è ¸ÀºÁAiÀÄzsÀ£À ¹UÀÄªÀÅzÀjAzÀ F PÀÄjvÀÄ PÉ«PÉ PÀæªÀÄ PÉÊUÉÆ¼Àî§ºÀÄzÉAzÀÄ ¸À®ºÉ ¤ÃrzÀgÀÄ. |
| 10. | qÁ. ªÀÄAdÄ£ÁxÀ JA,  G¥À ¤zÉÃð±ÀPÀgÀÄ,  gÉÃµÉä E¯ÁSÉ, PÉÆÃ¯ÁgÀ. | 1. »¥ÀÄà£ÉÃgÀ¼ÉAiÀÄ°è yæ¥ïì ªÀÄvÀÄÛ ªÉÄÊmïì ºÁªÀ½ ºÉZÁÑUÀÄwÛzÀÄÝ, ¤ªÀðºÀuÁ PÀæªÀÄUÀ¼À §UÉÎ ¥ÁævÉåQëPÉUÀ¼À£ÀÄß ºÀ«ÄäPÉÆAqÀÄ gÉÊvÀjUÉ ªÀiÁ»w ¤ÃqÀÄªÀÅzÀÄ. 2. ªÉÃ¸ïÖ rÃPÀA¥ÉÆÃ¸Àgï gÉÃµÉä gÉÊvÀjUÉ vÀÄA¨Á G¥ÀAiÀÄÄPÀÛªÁVzÀÄÝ EzÀ£ÀÄß ªÀÄÄAzÀÄªÀgÉ¹ J®è vÀgÀ¨ÉÃwUÀ¼À°è ªÀiÁ»w ¤ÃqÀÄªÀÅzÀÄ. |
| 11. | qÁ. dUÀ¢Ã±ï  G¥À ¤zÉÃð±ÀPÀgÀÄ, ¥À±ÀÄ¸ÀAUÉÆÃ¥À£É ªÀÄvÀÄÛ ¥À±ÀÄ ªÉÊzÀåQÃAiÀÄ ¸ÉÃªÁ E¯ÁSÉÀ, PÉÆÃ¯ÁgÀ | 1. ¥Àæ¸ÀÄÛvÀ gÉÊvÀgÀÄ ¹.N-3 ªÉÄÃ«£À vÀ½AiÀÄ£ÀÄß G¥ÀAiÉÆÃV¸ÀÄwÛzÀÄÝ ¥Àæ¸ÀÄÛvÀ §ºÀÄPÀmÁ«£À ¹.N.J¥sï.J¸ï-29 ªÀÄvÀÄÛ 31 vÀ½UÀ¼ÀÄ ©qÀÄUÀqÉAiÀiÁVªÉ. DzÀÄzÀjAzÀ ¸ÀÄzsÁjvÀ vÀ½UÀ¼À ©ÃeÉÆÃvÁàzÀ£ÉAiÀÄ£ÀÄß PÉÊUÉÆAqÀÄ gÉÊvÀjUÉ ¸ÀgÀ§gÁdÄ ªÀiÁqÀÄªÀÅzÀÄ. |
| 12. | ²æÃªÀÄw. ²ªÀªÀÄä,  G¥À ¤zÉÃð±ÀPÀgÀÄ, (¥ÀgÀªÁV) ªÀÄ»¼Á ªÀÄvÀÄÛ ªÀÄPÀÌ¼À PÀ¯Áåt E¯ÁSÉ, PÉÆÃ¯ÁgÀ (¥ÀgÀªÁV) | 1. CAUÀ£ÀªÁr PÁAiÀÄðPÀvÉðAiÀÄjUÉ ¥Ë¶×PÀ PÉÊvÉÆÃl ¤ªÀðºÀuÉAiÀÄ §UÉÎ vÀgÀ¨ÉÃwUÀ¼À ªÀÄÆ®PÀ w½¸ÀÄªÀÅzÀÄ. |
| 13. | ²æÃ. PÉ.JA. gÁdtÚ, PÀÈµÁÚ¥ÀÄgÀ, CªÀÄä£À®ÆègÀÄ ºÉÆÃ§½, PÉÆÃ¯ÁgÀ (¥ÀæUÀw¥ÀgÀ gÉÊvÀgÀÄ) | 1. UÁæªÀÄ ¥ÀAZÁAiÀÄw ªÀÄlÖzÀ°è PÀÈ¶ ªÀÄvÀÄÛ vÉÆÃlUÁjPÉ E¯ÁSÉUÀ¼ÀÀ ¸ÀºÀAiÉÆÃUÀzÀ°è ªÀÄtÄÚ ¥ÀjÃPÉë, gÀ¸ÀUÉÆ§âgÀUÀ¼À §¼ÀPÉ, QÃl ªÀÄvÀÄÛ ²°ÃAzÀæ £Á±ÀPÀUÀ¼À §¼ÀPÉ PÀÄjvÀÄ vÀgÀ¨ÉÃw PÁAiÀÄðPÀæªÀÄUÀ¼À£ÀÄß ºÀ«ÄäPÉÆAqÀÄ gÉÊvÀjUÉ ¸ÀÆPÀÛ ªÀiÁ»w ¤ÃqÀÄªÀÅzÀÄ. |
| 14. | ²æÃªÀÄw. gÀvÀßªÀÄä, UÀÄAqÀªÀÄ£ÀvÀÛ, ²æÃ¤ªÁ¸À¥ÀÄgÀ, PÉÆÃ¯ÁgÀ (PÀÈ¶ GzÀå«Ä) | 1. £ÀÆvÀ£À vÁAwæPÀvÉUÀ¼À §UÉÎ gÉÊvÀ/gÉÊvÀ ªÀÄ»¼ÉAiÀÄjUÉ CjªÀÅ ªÀÄÆr¸ÀÄªÀÅzÀÄ. |
| 15. | qÁ. ºÉZï.J¸ï. ²ªÀgÁªÀÄÄ, rÃ£ï ºÁUÀÆ ¸ÀºÀÀ «¸ÀÛgÀuÁ ¤zÉÃð±ÀPÀgÀÄ (zÀQët), vÉÆÃlUÁjPÉ ªÀÄºÁ«zÁå®AiÀÄ, PÉÆÃ¯ÁgÀ. | 1. PÀÈ¶ «eÁÕ£À PÉÃAzÀæPÉÌ LzÀÄ JPÀgÉ ¨sÀÆ«ÄAiÀÄ£ÀÄß ºÁUÀÆ MAzÀÄ ¨ÉÆÃgÀªÉ¯ï£ÀÄß vÉÆÃlUÁjPÉ ªÀÄºÁ«zÁå®AiÀÄzÀ ªÀw¬ÄAzÀ ¤ÃrzÀÄÝ EªÀÅUÀ¼À£ÀÄß G¥ÀAiÉÆÃV¹PÉÆAqÀÄ 2022-23£ÉÃ ¸Á°£À°è ºÉaÑ£À DzÁAiÀÄ ¥ÀqÉzÀÄPÉÆ¼ÀÄîªÀÅzÀÄ. 2. PÉëÃvÀæ ZÀlÄªÀnPÉUÀ¼ÀÄ ºÉZÁÑUÀÄªÀÅzÀjAzÀ ªÀiÁgÁl ªÀÄ½UÉAiÀÄ£ÀÄß PÉ«PÉAiÀÄ°è ¤«Äð¸ÀÄªÀÅzÀÄ. |

**PART II - DETAILS OF DISTRICT**

* 1. Major farming systems/enterprises (based on the analysis made by the KVK)

|  |  |
| --- | --- |
| S. No | Farming system/enterprise |
| Irrigated (bore well) | Tomato- Pole beans, Potato, Ragi, Vegetables, Mulberry, Coconut, Sapota, papaya, Guava etc. |
| Tank Irrigated | Paddy |
| Rainfed | Ragi based mixed cropping, Groundnut based intercropping, Maize, Pigeon pea, Horse gram, Field bean, Mango, Cashew, Tamarind etc. |
| Enterprises | Sericulture, Dairy, Poultry, Sheep and Goat rearing |

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

|  |  |  |
| --- | --- | --- |
| S. No | Agro-climatic Zone | Characteristics |
| 1 | Eastern dry zone | Kolar district is a drought prone district and all the taluks comes under agro climatic zone-5 i.e., eastern dry zone. It is characterized by low, scanty and uneven distributed rainfall with shallow and poor soils. Kolar district is having a typical rain fed situation with an average rainfall of 726.6 mm with 45.1 rainy days. |
| Agriculture in the district is mainly rain fed and it has no perennial rivers. Tanks and tube wells are the main sources of irrigation. The district has 2328 tanks irrigating an area of 22795ha and no. of tube wells are 84286 with a net irrigable area of 33469 ha which accounts for 19.61 % of net sown area. |
| S. No | Agro ecological situation | Characteristics |
| 1 | Semi-arid climate | The district receives an annual rainfall of 744 mm received in 45 rainy days. The duration of the monsoon, however, seems to be shrinking with the first three months in the year receiving very little rainfall in recent times. The rainfall distribution has two peaks, one during May and another during September. It is characterized by erratic and uneven distribution. Predominantly the tube wells/bore wells are the major source of irrigation in the district. There are about 41,311 ha of land being irrigated through such bore wells. The number of irrigation pump sets existing in the district is 50,366. Tanks and open wells are the other sources of irrigation. |

* 1. Soil type/s

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Soil type | Characteristics | Area in ha |
|  | Medium deep, red clayey soil | Red to a bright reddish-orange in color. They are typically quite acidic, often having a pH of less than 5. | 7026 |
|  | Medium deep, red gravelly soil | Red in color which is mainly due to ferric oxides. They are usually poor growing soils, low in nutrients and humus. | 17946 |
|  | Deep, red clayey loam soil | Clay loam is a soil mixture that contains more clay than other types of rock or minerals. These soils contains a good amount of plant nutrients and supports most types of plants and crops | 88400 |
|  | Deep, red clayey soil | Soil mixture contains less clay component. Nutritionally poor. | 119720 |
|  | Deep, red gravelly clay soil | Same as clayey loam but gravelly in nature | 20363 |
|  | Deep, lateritic clayey soil | These soils are rich in iron and aluminum. Nearly all laterites are rusty-red because of iron oxides. | 16813 |
|  | Deep, lateritic gravelly clayey soil | Characteristically similar to the lateritic clayey but stony and gravelly nature less suitable for arable crop cultivation | 10940 |
|  | Deep, alluvial clayey soil (salt affected) | A soil deposit developed on floodplain and delta deposits. Soil supports good crop growth. | 92843 |
|  | Red gravelly clay soils (Rocky land) | They are less clayey and sandier and are poor in important minerals like lime, phosphorous and nitrogen. Red soil is acidic like that of the Lateritic soil. | 11036 |

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

| S. No | Crop | Area (ha) | Production (Metric tons) | Productivity (kg /ha) |
| --- | --- | --- | --- | --- |
| Field crops | | | | |
|  | Ragi | 68505 | 158783 | 2317 |
|  | Ground nut | 7065 | 14187 | 7065 |
|  | Avare | 7675 | 4028 | 524 |
|  | Tur | 2445 | 1223 | 500 |
|  | Paddy | 1892 | 5680 | 3002 |
|  | Cowpea | 1048 | 439 | 271 |
|  | Maize | 206 | 45232 | 4000 |
|  | Horse gram | 239 | 970 | 1216 |
|  | Minor millets | 238 | 685 | 826 |
|  | Palak | 75 | 736 | 9814 |
| Vegetable crops | | | | |
|  | Tomato | 19930 | 1121884 | 56291 |
|  | Potato | 5490 | 90511 | 16487 |
|  | Beans | 2916 | 30899 | 10597 |
|  | Knol-khol | 2746 | 50696 | 18462 |
|  | Carrot | 1238 | 24123 | 19486 |
|  | Cabbage | 1230 | 25181 | 20473 |
|  | Cauliflower | 1158 | 19077 | 16475 |
|  | Brinjal | 424 | 13010 | 30685 |
|  | Green chilli | 685 | 13953 | 20369 |
|  | Capsicum | 681 | 13861 | 20355 |
|  | Radish | 679 | 8060 | 11872 |
|  | Cucumber | 459 | 7349 | 16011 |
|  | Pumpkin | 380 | 9628 | 25337 |
|  | Drumstick | 240 | 498 | 2076 |
|  | Ridge gourd | 229 | 2024 | 8840 |
|  | Beetroot | 156 | 2764 | 17723 |
|  | Methi | 119 | 1382 | 11617 |
|  | Amaranthus | 110 | 1917 | 17429 |
|  | Sweet potato | 108 | 1301 | 12053 |
|  | Bitter gourd | 107 | 867 | 8103 |
|  | Ladies finger | 98 | 896 | 9147 |
|  | Palak | 75 | 736 | 9814 |
|  | Onion | 66 | 1267 | 19211 |
|  | Ash gourd | 37 | 761 | 20589 |
|  | Peas | 36 | 570 | 15858 |
|  | Bottle gourd | 24 | 125 | 5055 |
|  | Snake gourd | 22 | 353 | 16060 |
|  | Curry leaves | 22 | 172 | 7825 |
|  | Cluster beans | 17 | 121 | 7129 |
| Fruit crops | | | | |
|  | Mango | 50259 | 429184 | 8539 |
|  | Banana | 521 | 16504 | 31679 |
|  | Canvandish | 391 | 12029 | 30766 |
|  | Guava | 588 | 10318 | 17548 |
|  | Sapota | 207 | 3181 | 15369 |
|  | Papaya | 280 | 20300 | 72503 |
|  | Pomegranate | 209 | 2223 | 10641 |
|  | Jack | 195 | 5121 | 26265 |
|  | Citrus and its sps. | 88 | 2295 | 26090 |
|  | Watermelon | 65 | 2859 | 44000 |
|  | Grapes | 41 | 720 | 17570 |
|  | Custard apple | 31 | 255 | 8227 |
| Plantation crops | | | | |
|  | Coconut | 1220 | 135 | 111 |
|  | Cashewnut | 154 | 302 | 1967 |
|  | Arecanut | 10 | 11 | 1160 |
|  | **Aromatic crops** |  |  |  |
|  | Davana | 121 | 1208 | 9988 |
|  | Geranium | 7 | 94 | 13429 |
| Spice crops | | | | |
|  | Tamarind | 1420 | 5945 | 4187 |
|  | Coriander | 1728 | 1051 | 609 |
|  | Ginger | 122 | 1532 | 12560 |
|  | Dry chilli | 659 | 1041 | 1581 |
|  | Turmeric | 15 | 138 | 9231 |
|  | Garlic | 12 | 92 | 7733 |
| Flower crops | | | | |
|  | Marigold | 2314 | 22406 | 9683 |
|  | Rose | 388 | 828 | 2135 |
|  | Chrysanthemum | 737 | 10432 | 14156 |
|  | Aster | 0 | 2 | 10120 |
|  | Jasmine | 9 | 64 | 7120 |
|  | Crossandra | 20 | 109 | 5482 |
| Sericulture | | | | |
|  | Mulberry | 19329 | 773160 | 40000 |
|  | Cocoon production | 134.87 lakh dfls | 9192 | 475 |

\* Statistics of KSDA and KSDH,Kolar

2.5. **Weather data :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | | Temperature 0 C | | Relative Humidity (%) |
|  | Normal | Actual | Maximum | Minimum |  |
| January | 2.0 | 15.6 | 27.88 | 17.01 | 84.35 |
| February | 4.2 | 21.4 | 29.74 | 15.728 | 73.72 |
| March | 11.7 | 0.9 | 33.99 | 17.72 | 61.41 |
| April | 27.0 | 52.0 | 35.22 | 19.49 | 65.93 |
| May | 72.3 | 69.7 | 34.46 | 21.15 | 70.32 |
| June | 65.5 | 73.1 | 30.87 | 20.81 | 75.73 |
| July | 78.7 | 195.3 | 29.27 | 20.38 | 83.22 |
| August | 94.0 | 180.0 | 29.16 | 20.16 | 81.35 |
| September | 160.0 | 172.0 | 29.62 | 20.2 | 80.16 |
| October | 136.0 | 235.0 | 28.98 | 19.79 | 82.48 |
| November | 64.0 | 283.0 | 25.93 | 19.03 | 89.96 |
| December | 20.0 | 17.0 | 26.99 | 15.17 | 85.31 |
| Total | **735.0** | **1316** |  |  |  |
| Average |  | **-** | **30.17** | **18.88** | **77.82** |

\* Please provide latest data from authorized sources: Met Centre, Bengaluru.

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Production** | **Productivity** |
| **Cattle** | | | |
| Crossbred | 173620 |  |  |
| Indigenous | 55416 |  |  |
| **Buffalo** | 45876 |  |  |
| **Sheep** | | | |
| Crossbred | 2198 |  |  |
| Indigenous | 442903 |  |  |
| **Goats** | 86263 |  |  |
| **Pigs** | 2385 |  |  |
| Crossbred | 1872 |  |  |
| Indigenous | 312 |  |  |
| **Rabbits** |  |  |  |
| **Poultry** | | | |
| Hens | 4275529 |  |  |
| Desi |  |  |  |
| Improved |  |  |  |
| Ducks |  |  |  |
| Turkey and others |  |  |  |
| Category | Area | Production | Productivity |
| Fish |  |  |  |
| Marine |  |  |  |
| Inland | 38.76 lakh(Fish seed stock) |  |  |
| Prawn |  |  |  |
| Scampi |  |  |  |
| Shrimp |  |  |  |

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

2.8 Details of Operational area / Villages

| Sl.No. | Taluk | Name of the block | Name of the village | How long the village is covered under operational area of the KVK (specify the years) | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Kolar | - | Yadahalli | 2 | Redgram, Field bean, Marigold, Cabbage, Sericulture, Dairying, Mushroom | 1. Farmers growing BRG-1 and other local verities, Farmers looking for dual purpose varieties. Severe yield loss due to wilt, SMD, leaf webber& Pod borer incidence 2. Severe incidence of insect pests especially pod borer 3. Poor quality flowers from 3rd harvest, low average flower weight and poor yield 4. Non adoption of integrated approaches in management of pests and diseases 5. Lack of information on better utilization of silkworm bed waste, non availability of proper technology 6. Low productivity of milk due to non feeding of green fodder and Increase in inter-calving period 7. Lack of information on scientific cultivation of Mushroom and lack of awareness on labeling and branding of the product | Yield optimization through improved varieties, IPM and IPDM |
|  | Bangarpet | - | Thimmasandra | 2 | Redgram, Field bean, Pole beans, Tomato, Dairying, Sericulture, Home Science | 1. Farmers growing BRG-1 and other local verities, Farmers looking for dual purpose varieties. Severe yield loss due to wilt, SMD, leaf webber& Pod borer incidence  2. Severe incidence of insect pests especially pod borer  3. Low yield due to severe incidence of Yellow Mosaic Virus  4. Indiscriminate use of nitrogenous fertilisers and increased cost of production  5. Low productivity of milk due to non feeding of green fodder and Increase in inter-calving period  6. Lack of information on better utilization of silkworm bed waste, non availability of proper technology  7. Health problems in population –Heart problem, BP, Diabetes and allied problems. | Judicious use of nutrients, IPM and IPDM and nutritional security |
|  | Srinivaspur | - | Kadudevandahalli | 2 | Ragi, Field bean, Rose onion, Mango, Tomato, Mulberry, Sericulture, Silkworm rearing, Dairying | 1. Early or mid season drought, erratic rainfall , blast and lack of awareness on use of micronutrients/biofertilizers 2. Severe incidence of insect pests especially pod borer 3. Local variety & poor yield quality 4. Inadequate water conservation measures, no micro nutrient management, poor canopy management and fruit drop 5. South American pin worm, Thrips, Early and Late blight menace, indiscriminate use of PP chemicals 6. Lack of information on application of suitable liquid microbial consortia to enhance soil fertility, mulberry and cocoon yield 7. Lack of information on better utilization of silkworm bed waste, non availability of proper technology 8. Severe infestation of uzifly, during rainy and winter, more defective cocoon leads to low cocoon price 9. Continuous phosphorous fertilizer application leads to P fixation n soil and lack of knowledge on recommended fertilizer schedule. 10. Low productivity of milk due to non feeding of green fodder during summer months 11. Depletion of soil nutrients, improper organic nutrient management, poor quality and quantity of mulberry leaves, poor quality cocoon | Yield optimization through improved varieties, ICM practices, better utilization of interspace, Effective pest and disease mgt. |
|  | Malur | - | Thippasandra | 2 | Ragi, Groundnut, Potato, Tomato | 1. Early or mid season drought, erratic rainfall , blast and lack of awareness on use of micronutrients/biofertilizers 2. Severe incidence of Stem rot disease in Groundnut 3. Lack of information on better utilization of unmarketable, disease infected, malformed tomato fruits , in APMC, non availability of proper technology for composting 4. Severe incidence of late blight, mite and defoliator problem and excess haulm development at the cost of tuber | Yield optimization through improved varieties, IPM and IPDM |
|  | Kolar | - | Shettihalli | 1 | Cashew, Bee keeping | 1. Integrated pest management in Cashew (Non cluster village) 2. Lack of scientific Beekeeping and processing | IPM practices in cashew,  Income generating through bee keeping |

2.9 Priority thrust areas

|  |  |
| --- | --- |
| **S. No** | **Thrust area** |
|  | Yield optimization through improved varieties |
|  | IPM and IDM and micro nutrient management in horticulture crops |
|  | Soil and water conservation & INM practices in fruits and vegetables |
|  | Insect pest management in mulberry and silkworm rearing |
|  | Effective conversion of organic waste in to manure |
|  | Income generating activities and Entrepreunership development activities |
|  | Providing nutritional security to farm families through nutri-gardens |

**PART III - TECHNICAL ACHIEVEMENTS**

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **OFT** | | | | **FLD** | | | |
| **1** | | | | **2** | | | |
| **OFTs (No.)** | | **Farmers (No.)** | | **FLDs (No.)** | | **Farmers (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 5 | 4 | 16 | 12 | 18 | 139 | 18 | 149 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Farmers/farm women)** | | | | **Training (Rural youth)** | | | |
| **3** | | | | **4** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 48 | 129 | 915 | 8544 | 4 | 7 | 80 | 453 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Extension personnel)** | | | | **Training (sponsored)** | | | |
| **5** | | | | **6** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 3 | 3 | 75 | 170 | - | - | - | - |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Training (Vocational)** | | | | **Extension Programmes** | | | |
| **7** | | | | **8** | | | |
| **Courses (No.)** | | **Participants (No.)** | | **Programmes (No.)** | | **Participants (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 2 | 3 | 150 | 241 | 796 | 2075 | 14490 | 19935 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed Production (Q)** | | **Planting material (Nos.)** | |
| **9** | | **10** | |
| **Target** | **Achievement** | **Target** | **Achievement** |
| Multicut Fodder sorghum:0.5 | 0.315 | Drumstick seedlings :5000 | 27332 |
| Sunhemp:5 | 1.2 | Mulberry seedlings :5000 | 3630 |
|  |  | Curry leaf seedlings :1000 | 1855 |
|  |  | Mango root stock: - | 140 |
|  |  | Fodder sold COFS-31 | 4000 kg |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Livestock, poultry strains and fingerlings (No.)** | | | | **Bio-products (Kg)** | | | |
| **11** | | | | **12** | | | |
| **Target** | | **Achievement** | | **Target** | | **Achievement** | |
|  | |  | | Waste Decomposer 20000 | | 1054 Nos | |
|  | |  | | Siddi Azola(Super powder) | | 10 kg | |
| **Soil, water, plant and manure analysis**  **(including mobile kits)** | | | | **Mobile agro advisories provided** | | | |
| **13** | | | | **14** | | | |
| **Samples (No.)** | | **Farmers (No.)** | | **Messages including text, voice (No.)** | | **Farmers (No.)** | |
| **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** | **Target** | **Achievement** |
| 660 | 618 | 660 | 618 | 104 (What app msg.) | 104 | 6000 | 7000 |

**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** |
|  |  | Potato | High cost and timely availability of seed tubers | Assessment of apical stem cuttings and tubers in potato to reduce seed tuber cost | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | Planting of ASC tubers | 100 kg  tubers |
| Seed tubers from Apical stem cuttings | 4500 seedlings /5 gunta |
|  |  | Tomato | Lack of information on better utilization of unmarketable, disease infected, malformed tomato fruits , in APMC, non availability of proper technology for composting | Assessment of different compost culture in composting of  Tomato waste | - | - | - | - | 2 | - | - | - | NCOF Uttar Pradesh Decomposer | 2 bottles |
| IIHR Arka Decomposer | 4 kg |
| UAS Bangalore Decomposer | 4 kg |
| Concretes rings/tanks | 12 no. |
|  |  | Tomato | High dose of N fertilizer | Assessment of spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato | - | - | - | - | 2 | - | - | - | 19:19:19 | 76 kg |
| KNO3 | 25 kg |
| Calcium Nitrate | 33 kg |
| Nano N 250 ml | 250 ml \* 2 no |
|  |  | Mulberry | Lack of information on application of suitable liquid microbial consortia to enhance soil fertility, mulberry and cocoon yield | Assessment of different liquid microbial consortia in mulberry for higher yield | - | - | - | - | 3 | - | - | - | NPK &  FYM | 115 kg  4 ton |
| Liquid microbial consortia | 3 ltrs |
| Arka Microbial Consortia | 3 ltrs |
| Waste decomposer bottle Soil & Leaf sample analysis charges | 2 bottles  3 Sample |
|  |  | Mulberry | Thrips & Mites occur throughout the year, their incidence is severe during summer months & prolonged dry periods leads to low quality mulberry | Assessment on management practices of mites & thrips in mulberry | - | 2 | - | - | 5 | - | - | - | Dimethoate | 500 ml |
| Propargite | 500 ml |
| Dimethoate | 500 ml |
| Fenzaguin | 500 ml |
| wettable sulphur | 500 gm |
| Shatpada-Allrounder | 16 kg |
| Shatpada-Master Blaster | 16 kg |
| Leaf analysis | 3 No |
|  |  | Ragi | Early or mid season drought, erratic rainfall and lack of awareness on use of biofertilizers |  | Demonstration of Ragi variety, KMR 630 for drought mitigation and delayed sowings | 1 | - | - | 5 | - | - | - | Seeds | 5 kg |
| Azospirillum | 200 g |
| Carbendazim | 250 g |
| Chlorpyriphos | 1000 ml |
|  |  | Groundnut | Severe incidence of Stem rot (30%) |  | Management of Stem rot disease in Groundnut | 1 | - | - | 3 | - | - | - | Trichodermaharzianum | 5 Kg |
| Tebuconazole | 500ml |
|  |  | Field bean | Lack of information on improved varieties & seed treatment Low yield due to severe incidence of pod borer, Aphids, |  | Integrated Crop Management in Field bean | - | - | - | 4 | - | - | - | HA4 seeds | 2 KG |
| Bio fertilizers for Seed treatment | 1Kg |
| Pulse magic | 2 kgs |
| Dimethoate | 400 ml |
| Emamectin  Benzoate | 100 g |
|  |  | Redgram | Farmers growing BRG-1 and other local verities  Farmers looking for dual purpose varieties  Severe yield loss due to wilt, SMD, leaf webber& Pod borer  Incidence |  | Introduction of BRG-3 in redgram & Disease and Pest Management | 1 | - | - | 3 | - | - | - | Seeds | 6 kg |
| Pulse magic | 5 kg |
| Bio fertilizers for Seed treatment | 1 kg |
| Pheramone traps and lures | 10+10 |
| Spinosad (microbial) | 75 ml |
|  |  | Rose Onion | Local variety & poor yield quality |  | Improved production technology in Rose onion | - | - | - | - | - | - | - | ArkaVishwas | 1 kg |
| Plant growth regulator | 400 ml |
|  |  | Pole beans | Low yield due to severe incidence of Yellow Mosaic Virus |  | Integrated management of yellow mosaic virus in pole bean | - | - | - | 5 | - | - | - | Pseudomonas fluorescens | 3 lt |
| Yellow Sticky Traps | 10 |
| Neem soap | 2 kg |
| Imidacloprid | 120 ml |
| Seaweed extract | 500ml |
| Thiomethaxam | 100 gm |
|  |  | Mango | Poor management of canopy, lack of knowledge on micronutrients, poor soil fertility and water management, improper harvesting |  | Integrated crop management in mango | 3 | - | - | 6 | - | - | - | Basin preparation | 20 No |
| Sun hemp | 10 kg |
| Pruning secature | 1 No |
| Mango special | 8 kg |
| Fruit fly traps | 4+3 No |
| Mango harvesters | 1 No |
|  |  | Tomato | South American pin worm, Thrips, Early and Late blight menace, indiscriminate use of PP chemicals |  | Integrated insect pest and disease management in Tomato | 2 |  |  | 3 |  |  |  | AMC | 2 ltr |
| Vegetable spl. | 3 kg |
| Pheromone traps | 10 no. |
| Yellow and blue sticky traps | 20+20 no. |
| Neemazal | 1 l |
| Mancozeb | 2.0 kg |
| Spineterom | 100 ml |
| Fenamidone+mancozeb | 0.6 kg |
| Flubendiamide | 30 ml |
| Fostyl Al | 1.0 kg |
|  |  | Potato | Severe incidence of late blight, mite and defoliator problem and excess haulm development at the cost of tuber |  | Management of late blight in Potato through integrated approach | 3 |  |  | 6 |  |  |  | Trichoderma spp. | 5kg |
| Pseudomonas spp | 5 kg |
| Mepiquat chloride (1000 ppm) | 500ml |
| Mancozeb | 1.5 kg |
| Fenomidon+  Mancozeb | 600 g |
| Cymoxanil+ Mancozeb | 400 g |
|  |  | Marigold | Poor quality flowers from 3rd harvest, low average flower weight and poor yield |  | Micronutrient management in marigold |  |  |  | 4 |  |  |  | MgSO4 | 500 g |
| ZnSO4 | 2.40 kg |
| Borax | 100 g |
| FeSO4 | 2.00 kg |
| Humic acid | 200 ml |
|  |  | Cashew | Severe incidence of Tea mosquito bug in Cashew |  | Integrated pest management in Cashew | 1 |  |  | 3 |  |  |  | Lambda cyhalothrin 25EC | 2 |
| Dimethoate30 EC’ | 1 |
| Copperoxy chloride 50 WP | 1 |
|  |  | Chia | Lack of knowledge of potential crop chia for Health and nutritional security. |  | Introduction of potential crop chia for balanced diet |  |  |  | 2 |  |  |  | Chia seeds | 500 |
| Microbial consortia | 100 |
|  |  | Silkworm | Lack of information on better utilization of silkworm bed waste & compost culture |  | Recycling of Seri farm residue with waste decomposer consortia for quality compost production | 2 |  |  | 3 |  |  |  | Compost bag | 2 |
| Waste decomposer bottle | 4 |
| Seri farm residue | 1 ton |
|  |  | Silkworm | Severe infestation of uzifly during rainy and winter, more defective cocoon leads to low cocoon price |  | Management of uzifly in silkworm rearing |  |  |  | 4 |  |  |  | Sex pheromone trap | 5 |
| Nylon net | 1 roll |
|  |  | Mulberry Cultivation | Continuous Phophorous fertilizer application leads to P fixation n soil Lack of knowledge on recommended fertilizer schedule. |  | Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in mulberry |  |  |  | 2 |  |  |  | Ammonium Sulfate | 145 |
| SSP | 70 |
| MOP | 20 |
| VAM | 100 |
| PSB | 10 |
| Soil Analysis | 2 |
|  |  | Dairy | Low productivity of milk due to non feeding of green fodder during summer months |  | Demonstration of silage techniques for decreasing inter-calving period & better milk production |  |  |  | 2 |  |  |  | Silage bags 100 kgs Capacity | 2 |
| Silage Culture | 500 g |
|  |  | Dairy | Low productivity of milk due to non feeding of green fodder during summer |  | Demonstration of Azolla production for enhancing milk yield |  |  |  | 2 |  |  |  | Azolla Culture | 1 kg |
| Poly Tarpaulin (HDPE 200 GSM) sheets (12' x 9') | 1 |
|  |  | Dairy | Low productivity of milk due to non feeding of green fodder,  Increase in inter-calving period |  | Demonstration on Fodder cafeteria for continuous supply of green fodder |  |  |  | 2 |  |  |  | COFS-31 | 500 g |
| Guinea grass | Slips  550 no |
| Hybrid Napier – DHN-6 | Slips  1095 no |
| Signal Grass | Slips  1675 no |
| Lucerne | 250 grams |

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

| **S.No** | **Title of Technology** | **Source of technology** | **Crop/enterprise** | **No.of programmes conducted** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **OFT** | **FLD** | **Training** | **Others (Specify)** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  | Assessment of apical stem cuttings and tubers in potato to reduce seed tuber cost | UHS, Bagalkote | Potato | **-** | **-** | - | - |
|  | Assessment of different compost culture in composting of  Tomato waste | UAS, Bengaluru | Tomato | 2 | **-** | - | 2 (field visit) |
|  | Assessment of spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato | IFFCO, New Delhi | Tomato | 3 | - | - | 2 (field visit) |
|  | Assessment of different liquid microbial consortia in mulberry for higher yield | NCOF, Ghaziabad | Mulberry | 3 | - | - | 3 (field visit) |
|  | Assessment on management practices of mites & thrips in mulberry | NBAIR, Bengaluru | Mulberry | 3 |  | 2 | 1. (field visit ) |
|  | Demonstration of Ragi variety, KMR 630 for drought mitigation and delayed sowings | UAS,B | Ragi | - | 20 | 1 | 5( field visit) |
|  | Management of Stem rot disease in Groundnut | UAS, Raichur & UAS B | Groundnut | - | 5 | 1 | 3 (field visit) |
|  | Integrated Crop Management in Field bean | UAS, B | Field bean | - | 10 | - | 4 (field visit) |
|  | Introduction of BRG-3 in redgram & Disease and Pest Management | UAS,B | Redgram | - | 15 | 1 | 3 (field visit) |
|  | Improved production technology in Rose onion | IIHR &UHS, Bagalkot | Rose Onion | - | 5 | - | 2 (field visit) |
|  | Integrated management of yellow mosaic virus in pole bean | IIVR, Varanasi | Pole beans | - | 5 | - | 5 (field visit) |
|  | Integrated crop management in mango | IIHR &UHS, Bagalkot | Mango | - | 5 | 3 | 1. (field visit)   1 (method demonstration) |
|  | Integrated insect pest and disease management in Tomato | IIHR, Bengaluru and  UHS, Bagalkot | Tomato | - | 5 | 2 | 3 (field visit) |
|  | Management of late blight in Potato through integrated approach | UHS(B) | Potato | - | 5 | 3 | 1. (field visit)   1 (Diagnostic visit) |
|  | Micronutrient management in marigold | IIHR, Bengaluru, TNAU, Coimbatore | Marigold | - | 3 | - | 2 (field visit) |
|  | Integrated pest management in Cashew | UHS,B | Cashew | - | 5 | 1 | 3 (field visit) |
|  | Introduction of potential crop chia for balanced diet | UAS,B | Chia | - | 10 | - | 2 (field visit) |
|  | Recycling of Seri farm residue with waste decomposer consortia for quality compost production | NCOF, Ghaziabad | Silkworm | - | 5 | 2 | 3 (field visit) |
|  | Management of uzifly in silkworm rearing | CSRTI Mysore & NBAIR Bangalore | silkworm | - | 10 | - | 4 (field visit) |
|  | Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in mulberry | CSRTI,Mysore & CSB | Mulberry Cultivation | - | 5 | - | 1 (field visit)  1 (Method demonstration) |
|  | Demonstration of silage techniques for decreasing inter-calving period & better milk production | KVAFSU,Bidar | Dairy | -- | 15 | - | 1 (field visit )  1 (Method demonstration) |
|  | Demonstration of Azolla production for enhancing milk yield | KVAFSU,Bidar | Dairy | - | 15 | - | 2 (field visit) |
|  | Demonstration on Fodder cafeteria for continuous supply of green fodder | IGFRI, Dharwad, KVAFSU, Bidar | Dairy | - | 6 | - | 2 (field visit) |

**3.B2 contd..**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No. of farmers covered** | | | | | | | | | | | | | | | |
| **OFT** | | | | **FLD** | | | | **Training** | | | | **Others (Specify)** | | | |
| **General** | | **SC/ST** | | **General** | | **SC/ST** | | **General** | | **SC/ST** | | **General** | | **SC/ST** | |
| **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 10 | - | 1 | - | 123 | 5 | 21 | - | 3214 | 325 | 756 | 51 | 12745 | 1964 | 1221 | 212 |

**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 |  |  |  |  | Tomato |  |  |  |  | 1 |
| Varietal Evaluation |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management |  |  |  | Mulberry  Mulberry |  |  |  |  |  | 2 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Resource Conservation Technology |  |  |  |  | Tomato |  |  |  |  | 1 |
| Farm Machineries |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |  |  |  |  |  |
| Storage Technique |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems |  |  |  |  | Potato |  |  |  |  | 1 |
| Farm Mechanization |  |  |  |  |  |  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| others |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  |  | **2** | **3** |  |  |  |  | **5** |

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

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

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

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

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

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Crop** | **Name of the technologies** | **No. of trials** | **Number of farmers / locations** | **Area in ha (Per trial covering all Technological Options in a farm)** |
| Integrated Nutrient Management | Tomato | Assessment of spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato | 3 | 3 | 0.75 |
| Mulberry | Assessment of different liquid microbial consortia in mulberry for higher yield | 3 | 3 | 1.2 |
| Varietal Evaluation |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Pest Management | Mulberry | Assessment on management practices of mites & thrips in mulberry | 3 | 3 | 1.2 |
|  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Disease Management |  |  |  |  |  |
|  |  |  |  |  |
| Small Scale Income Generation Enterprises |  |  |  |  |  |
|  |  |  |  |  |
| Weed Management |  |  |  |  |  |
|  |  |  |  |  |
| Resource Conservation Technology | Tomato | Assessment of different compost culture in composting of  Tomato waste | 2 | 2 | - |
|  |  |  |  |  |
| Farm Machineries |  |  |  |  |  |
|  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |
|  |  |  |  |  |
| Seed / Plant production | Potato | Assessment of apical stem cuttings and tubers in potato to reduce seed tuber cost | 4 | 4 | 0.4 |
|  |  |  |  |  |
| Value addition |  |  |  |  |  |
|  |  |  |  |  |
| Drudgery Reduction |  |  |  |  |  |
|  |  |  |  |  |
| Storage Technique |  |  |  |  |  |
|  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |
|  |  |  |  |  |
| Others |  |  |  |  |  |
| **Total** |  |  | **15** | **15** | **3.55** |

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

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

**4.B.3. Technologies assessed under Livestock : Nil**

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

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

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

4.B.5**. Technologies assessed under various enterprises by KVKs : Nil**

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

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

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

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of  trials | Technology Assessed | Source of technology | Yield | Unit of yield | Observations other than yield | Gross Return Rs. / unit | Net Return Rs. / unit | BC Ratio (Gross income/ Gross Cost) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Potato |  | High cost and timely availability of seed tubers | Assessment of apical stem cuttings and tubers in potato to reduce seed tuber cost | 4 | TO1:Sowing of potato seed tubers (KufriJyothi) | Farmers’ Practice | Not implemented.  (This year Kolar has received rains up to December 1st week of 2021, farmers were not able to plough the land. On another side, the ARC seedlings were also not available because of rains in Hassan area. Further, January is not suitable for sowing of potato ARC. Hence OFT is not initiated) | | | | | |
| TO2:Sowing of seed tubers obtained from Apical stem cuttings (G0) (KufriJyothi) | UHS, Bagalkote |
| TO3:Planting of apicalstem cuttings (KufriJyothi) | UHS, Bagalkote |
| Tomato | Irrigated | Lack of information on better utilization of unmarketable, disease infected, malformed tomato fruits , in APMC, non availability of proper technology for composting | Assessment of different compost culture in composting of  Tomato waste | 2 | TO1:Throwing of discarded tomato as it is | Farmers practice | Under Progress | | | | | |
| TO2:Tomato waste + Waste decomposer (2kg Jaggery in 200 L water ) | NCOF, Ghaziabad |
| TO3:Tomato waste+ ArkaDecomopser (1l/one) | IIHR, Bengaluru |
| TO4:Tomato waste + Decomposer (1l per one of waste) | UAS, Bengaluru |
| Tomato | Irrigated | High dose of N fertilizer | Assessment of spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato | 3 | TO1:Indiscriminate use of N fertilizers (300 kg N) | Farmers’ Practice | 68.50 | t/ha | Plant Height-118 cm  No. of fruits per plant-61 nos  Weight of fruit-76 gm | 685000 | 476500 | 2.44 |
| TO2:a.RDF – 60:45:60 kg/acre  b.20% RDF as basal fertilizer application  c.80% RDF through Fertigation (Water soluble fertilizers once in 3 days) | IIHR, Bengaluru | 75.65 | t/ha | Plant Height-114  No. of fruits per plant-58  Weight of fruit-75 gm | 756500 | 445000 | 3.15 |
| TO3:FP-50% N + 2 sprays of Nano-N | IFFCO, New Delhi | 80.50 | t/ha | Plant Height-110 cm  No. of fruits per plant-71 Nos  Weight of fruit-88 gm | 620000 | 805000 | 3.69 |
| Mulberry |  | Lack of  information  on application  of suitable  liquid  microbial  consortia to  enhance soil  fertility,  mulberry and  cocoon yield | Assessment of different liquid microbial consortia in mulberry for higher yield | 3 | TO1:Application of Recommended NPK & FYM (140:56:56 kg and 8 ton acre / year) | Farmers’ Practice | 102.36 | q/ha/  crop | No. of branches/pant: 13.48  No. of leaves /plant: 23.40  Leaf yield (kg/plant): 1.106  Leaf yield(q/ha/year):511.80  Cocoon yield : 368.50 | 138187 | 88187 | 2.76 |
| TO2:Application of Recommended NPK & FYM (140:56:56 kg and 8 ton acre / year)+ supply of liquid microbial consortia through drip (3lts/acre/crop) | UAS, Bengaluru | 120.51 | q/ha/  crop | No. of branches/pant: 15.40  No. of leaves /plant: 26.36  Leaf yield (kg/plant): 1.302  yield(q/ha/year):602.58  Cocoon yield : 457.96 | 183184 | 132734 | 3.63 |
| TO3:Application of Recommended NPK & (140:56:56 kg and 8 ton acre / year) + supply of Arka microbial consortia through drip (3lts/acre/crop) | IIHR, Bengaluru | 119.80 | q/ha/  crop | No. of branches/pant: 15.31  No. of leaves /plant: 26.15  Leaf yield (kg/plant): 1.294  yield(q/ha/year):599.03  Cocoon yield : 455.25 | 182100 | 131311 | 3.58 |
| TO4:Application of Recommended NPK & FYM (140:56:56 kg and 8 ton acre / year) + Supply of Waste decomposer solution (200 ltrs/acre/crop) | NCOF, Ghaziabad | 114.96 | q/ha/  crop | No. of branches/pant: 15.12  No. of leaves /plant: 25.63  Leaf yield (kg/plant): 1.241  yield(q/ha/year):574.81  Cocoon yield : 436.85 | 174740 | 124500 | 3.48 |
| Mulberry |  | Thrips &  Mites occur  throughout  the year, their  incidence is  severe during  summer  months &  prolonged dry  periods leads  to low  quality  mulberry | Assessment on management practices of mites &thrips in mulberry | 3 | TO1: Spraying of Dichlorvos (0.2%), Dimethoate 30 EC (0.2%), Neem soap (10gm/L) at 12-15 DAP | Farmers practice | Under progress | | | | | |
| TO2 : Spraying of Dimethoate 30% EC (0.2%) at 8 DAP &propargite 57 EC (0.15%) at 15 DAP | UAS Bengaluru |
| TO3 : Spraying of Dimethoate 30% EC (0.3%) at 8 DAP &Fenzaguin (1.5 ml/l) (20 days)/ Cyenopyrafen  (0.5 ml/l) (15 days) and wettable sulphur (80%) 3 g/l. (after 35 days) | CSRTI Mysore |
| TO4 : Spraying of Fungus (Shatpada-All rounder) - @ 20 gm/liter & Bacteria (Shatpada-Master Blaster) - @ 20 gm/litre | NBAIR, Bengaluru |

1. C2. Feedback on technologies assessed

|  |  |  |
| --- | --- | --- |
| Name of technology assessed | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
| Assessment of spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato | Application of nano urea resulted in increasing nutrient use efficiency & reduction in cost of cultivation | - |
| Assessment of different liquid microbial consortia in mulberry for higher yield | Among the different liquid microbial consortia applied to mulberry garden, application of 3 ltrs of UASB liquid microbial consortia through drip irrigation found best and resulted in increased leaf and cocoon yield (17.73% and 24.27%) followed by application of 3 ltrs of IIHR Arka microbial consortia through drip irrigation (17.03% and 23.54%) and supply of waste decomposer solution through drip irrigation (12.31 % and 18.54 %) compare to farmer practice.  These liquid consortia are ecofriendly in nature, cheap and easily available | - |

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

**1. Title of Technology Assessed:** **Assessment of different liquid microbial consortia in mulberry for higher yield**

2. Performance of the Technology on specific indicators: Supplementation of 3 ltrs of liquid microbial consortia developed by UAS Bangalore through drip irrigation found best and increased leaf and cocoon yield (17.73% and 24.27%) followed by supply of 3 ltrs of Arka microbial consortia through drip irrigation (17.03% and 23.54%) and supply of waste decomposer solution through drip irrigation (12.31 % and 18.54 %) compare to farmer practice

3. Specific Feedback from farmers: Among the different liquid microbial consortia applied to mulberry garden, supplementation of 3 ltrs of liquid microbial consortia developed by UAS Bangalore through drip irrigation found best in all parameters and it was on par with supply of 3 ltrs of Arka microbial consortia through drip irrigation and followed by supply of waste decomposer solution through drip irrigation compare to farmer practice.

4. Specific Feedback from Extension personnel and other stakeholders :Supplementation of 3 ltrs of liquid microbial consortia developed by UAS Bangalore through drip irrigation has enhanced soil nutrients, improvement in growth parameters of mulberry and cocoon yield and also these liquid consortia are ecofriendly in nature, cheap and easily available to farmers

5. Feedback to Research System based on results and feedback received: Liquid microbial consortia developed by research institutes are found better in all parameter over farmer practice

6. Feedback on usefulness and constraints of technology: Improvement in soil health, balanced nutrient management and eco

friendly in nature .

1. **Title of Technology Assessed: Assessment of spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato**
2. Performance of the Technology on specific indicators: 50% N + 2 sprays of Nano-N. Application of nano urea resulted in increasing nutrient use efficiency & reduction in cost of cultivation, Plant Height-110 cm, No. of fruits per plant-71 Nos, Weight of fruit-88 gm
3. Specific Feedback from farmers: among different combinations of nutrient management application of Nano urea is easy and best.
4. Specific Feedback from Extension personnel and other stakeholders: 50% N + 2 sprays of Nano-N. Found best technology for increasing the nutrient use efficiency, yield and reduction in cost of cultivation.
5. Feedback to Research System based on results and feedback received : Application of nano urea resulted in increasing nutrient use efficiency & reduction in cost of cultivation
6. Feedback on usefulness and constraints of technology: Increase in nutrient use efficiency, yield and quality parameters

**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 | Gross Return Rs. / unit | Net Return Rs. / unit | BC Ratio (Gross income/ Gross Cost) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

4. D2. Feedback on technologies refined

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

4.D.2. Details of Technologies refined:

1. Title of Technology Refined

2. Performance of the Technology on specific indicators

3. Specific Feedback from farmers

4. Specific Feedback from Extension personnel and other stakeholders

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

6. Feedback on usefulness and constraints of technology

**PART V - FRONTLINE DEMONSTRATIONS**

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

| Sl.  No. | Category | Farming  Situation | Season | Crop | Variety/ breed | Hybrid | Thematic area | Technology Demonstrated | Area (ha) | | Farmers (No.) | | Farmers (No.) | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Proposed | Actual | SC/ST | Others | Small/ Marginal | Others |
| 1. | Oilseeds | Rainfed | Kharif | Groundnut | KCG6 | - | Plant protection | Management of stem rot disease in Groundnut | 1 | 1 | - | 5 | - | 5 |
| 2. | Pulses | Rainfed | Kharif | Redgram | BRG-4 | - | Crop production | Introduction of BRG-4 in Redgram and Disease and Pest management | 1 | 4 | 5 | 10 | 5 | 10 |
| 3. |  | Rainfed | Rabi | Field bean | HA-4 | - | Plant Protection | Integrated Crop Management in Field bean | 2 | 2 |  | 5 | - | 5 |
|  | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. | Millets | Rainfed | Kharif | Ragi | KMR-630 | - | Crop production | Demonstration of Ragi variety, KMR 630 for drought mitigation and delayed sowings | 8 | 8 | 5 | 15 | 5 | 15 |
|  | Vegetables |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. |  | Irrigated | Rabi | Rose onion | Arka Bindu | - | Crop production | Improved production technology in Rose onion | 1 | 1 |  | 5 | - | 5 |
| 6. |  | Irrigated | Kharif | Pole beans | Asoka NZ | - | Disease management | Integrated management of yellow mosaic virus in pole bean | 1 | 1 | 3 | 2 | 3 | 2 |
| 7. |  | Irrigated | Rabi | Tomato | - | Saaho | Plant Protection | Integrated insect pest and disease management in Tomato | 1 | 1 | - | 5 | - | 5 |
| 8. |  | Irrigated | Rabi | Potato | K. Jyothi | - | Plant Protection | Management of late blight in Potato through integrated approach | 1 | 1 | - | 5 | - | 5 |
| 9. | Flowers | Irrigated | Kharif | Marigold | - | Benztall | Nutrient management | Micronutrient management in marigold | 1.2 | 1.2 | - | 3 | - | 3 |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. | Fruit | Rainfed | Kharif and winter | Mango | Mallika |  | Crop management | Integrated crop management in mango | 2 | 2 | - | 5 | - | 5 |
|  | Spices and condiments |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fodder |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. | Plantation | Rainfed | Rabi/  summer | Cashew | Ullal-3 | - | Plant Protection | Integrated pest management in Cashew | 2 | 2 | - | 5 | - | 5 |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. | Dairy | - | Rabi/  summer | Dairy | - | - | Crop production | Demonstration of silage techniques for decreasing inter-calving period & better milk production | 15 units | 15 units | 2 | 13 | 2 | 13 |
| 13. |  | - | Rabi/  summer | Dairy | - | - | Crop production | Demonstration of Azolla production for enhancing milk yield | 15 units | 15 units | 3 | 12 | 3 | 12 |
| 14. |  | - | Rabi/  summer | Dairy | - | - | Crop production | Demonstration on Fodder cafeteria for continuous supply of green fodder | 1.25 | 1.25 | 1 | 5 | 1 | 5 |
|  | Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Piggery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Common carps |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mussels |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Ornamental fishes |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15. | Sericulture | Irrigated | Kharif | Silkworm | - | - | - | Recycling of Seri farm residue with waste decomposer consortia for quality compost production | 2.0 | 5 units | - | 5 | - | 5 |
| 16. |  | Irrigated | Kharif | Silkworm | - | - | - | Management of uzifly in silkworm rearing | 1000  (dfls) | 1000  (dfls) | - | 10 | - | 10 |
| 17. |  | Irrigated | Kharif | Mulberry | - | V-1 |  | Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in mulberry | 1 | 1 | - | 5 | - | 5 |
|  | Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Implements |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Others (specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18. | Home Science |  |  | Chia |  |  |  | Introduction of potential crop chia for balanced diet | 2 | 2 | 2 | 8 | 2 | 8 |

**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 | Rainfed | Kharif  2021-22 | Groundnut | K-6 | - | Plant protection | Management of stem rot disease in Groundnut | Kharif  2021-22 |  |  |  |  |
| 2. | Pulses | Rainfed | Kharif  2021-22 | Redgram | BRG-4 | - | Crop production | Introduction of BRG-4 in Redgram and Disease and Pest management | Kharif  2021-22 | low | Medium | high | tomato |
| 3. |  | Rainfed | Rabi  2021-22 | Field bean | HA-4 | - | Plant Protection | Integrated Crop Management in Field bean | Rabi  2021-22 |  |  |  |  |
|  | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. | Millets | Rainfed | Kharif  2021-22 | Ragi | KMR-630 | - | Crop production | Demonstration of Ragi variety, KMR 630 for drought mitigation and delayed sowings | Kharif  2021-22 | Low | medium | low | Barren land |
| 5. | Vegetables | Irrigated | Rabi  2021-22 | Rose onion | Arka Bindu | - | Crop production | Improved production technology in Rose onion | Rabi  2021-22 |  |  |  |  |
| 6. |  | Irrigated | Kharif  2021-22 | Pole beans | Asoka NZ | - | Crop production | Integrated management of yellow mosaic virus in pole bean | Kharif  Rabi  2021-22 |  |  |  |  |
| 7. |  | Irrigated | Rabi  2021-22 | Tomato | - | Saaho | Disease management | Integrated insect pest and disease management in Tomato | Rabi  2021-22 |  |  |  |  |
| 8. |  | Irrigated | Rabi  2021-22 | Potato | Kufri Jyothi |  | Plant Protection | Management of late blight in Potato through integrated approach | Rabi  2021-22 |  |  |  |  |
| 9. | Flowers | Irrigated | Kharif  2021-22 | Marigold | - | Benztall | Nutrient management | Micronutrient management in marigold | Kharif  2021-22 |  |  |  |  |
|  | Ornamental |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. | Fruit | Rainfed | Kharif and winter  2021-22 | Mango | Mallika | - | crop management | Integrated crop management in mango | Kharif & winter  2021-22 |  |  |  |  |
|  | Spices and condiments |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Commercial |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Medicinal and aromatic |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fodder |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. | Plantation | Rainfed | Rabi/  Summer  2021-22 | Cashew | Ullal-3 | - | Plant Protection | Integrated pest management in Cashew | Rabi/  Summer  2021-22 |  |  |  |  |
|  | Fibre |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. | Dairy | - | Rabi/  Summer  2021-22 | Dairy | - | - | Crop production | Demonstration of silage techniques for decreasing inter-calving period & better milk production | Rabi/  Summer  2021-22 |  |  |  |  |
| 13. |  | - | Rabi/  Summer  2021-22 | Dairy | - | - | Crop production | Demonstration of Azolla production for enhancing milk yield | Rabi/  Summer  2021-22 |  |  |  |  |
| 14. |  | - | Rabi/  Summer  2021-22 | Dairy | - | - | Crop production | Demonstration on Fodder cafeteria for continuous supply of green fodder | Rabi/  Summer  2021-22 | Low | Medium | low | Barren land |
| 15. | Sericulture | Irrigated | Kharif  2021-22 | Silkworm | - | - | - | Recycling of Seri farm residue with waste decomposer consortia for quality compost production | Kharif  2021-22 | Low | Medium | low | Perennial crop |
| 16. |  | Irrigated | Kharif  2021-22 | Silkworm | - | - | - | Management of uzifly in silkworm rearing | Kharif  2021-22 | Low | Medium | low | Perennial crop |
| 17. |  | Irrigated | Kharif  2021-22 | Mulberry | - | V-1 | - | Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in mulberry |  |  |  |  |  |
| 18. | Home science |  |  | Chia |  |  |  | Introduction of potential crop chia for balanced diet |  |  |  |  |  |

**5.B. Results of FLDs**

**5.B.1. Crops**

| Crop | Name of the technology demonstrated | Variety | Hybrid | Farming situation | No. of Demo. | Area  (ha) | | Yield (q/ha) | | | | | | | |  | | | % Increase | | Economics of demonstration (Rs./ha) | | | | | | | | Economics of check (Rs./ha) | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  | | Demo | | | | | | | | Check | | |  | | Gross  Return | | | Net Return | | | | BCR | Gross  Return | | | | Net Return | | BCR | |
|  |  |  |  |  |  |  | | H | | L | | | A | | |  | | |  | |  | | |  | | | |  |  | | | |  | |  | |
| Oilseeds | Management of stem rot disease in Groundnut | K-6 | - | Rainfed | 5 | 1 | | 9.24 | | 8.72 | | | 8.94 | | | 6.47 | | | 38.17 | | 49,170 | | | 17,150 | | | | 1.53 | 35,618 | | | | 11,558 | | 1.48 | |
| Pulses | Introduction of BRG-4in redgram & Disease and Pest | BRG-4 | - | Rainfed | 15 | 4 | | 11.25 | | 8.50 | | | 9.75 | | | 9.00 | | | 24.00 | | 63,375 | | | 50,000 | | | | 4.73 | 58,500 | | | | 44,500 | | 4.17 | |
|  | Integrated Crop Management in Field bean | HA-4 | - | Rainfed | 5@yadahalli | 1 | | 21.8 | | 20.9 | | | 21.48 | | | 16.42 | | | 30.81 | | 96,660 | | | 57,228 | | | | 2.45 | 73,890 | | | | 22,300 | | 1.43 | |
| 5@ Thimmasandra | 24.3 | | 20.2 | | | 22.62 | | | 19.0 | | | 18.94 | | 85,956 | | | 45,096 | | | | 2.1 | 72,200 | | | | 27,546 | | 1.4 | |
| Cereals |  |  |  |  |  |  | |  | |  | | |  | | |  | | |  | |  | | |  | | | |  |  | | | |  | |  | |
| Millets | Demonstration of Ragi variety, KMR 630 for drought mitigation and delayed sowings | KMR-630 | - | Rainfed | 20 | 8 | | 35.0 | | 32.0 | | | 33.5 | | | 28.0 | | | 11.96 | | 1,07,250 | | | 90,000 | | | | 6.21 | 98,000 | | | | 80,000 | | 5.44 | |
| Vegetables |  |  |  |  |  |  | |  | |  | | |  | | |  | | |  | |  | | |  | | | |  |  | | | |  | |  | |
|  | Improved production technology in Rose onion | Arka Bindu | - | Irrigated | 5 | 1 | | Under Progress | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Integrated management of yellow mosaic virus in pole bean | Ashoka NZ | - | Irrigated | 5 | 1 | | 85.00 | | 45.00 | | | 69.20 | | | 60.8 | | | 13.81 | | | 3,46,000 | 2,08,000 | | | 2.51 | | | 3,04,000 | | 1,79,000 | | | | | 2.40 |
|  | Integrated insect pest and disease management in Tomato | - | Saaho | Irrigated | 5 | 1 | | 660 | | 605 | | | 635 | | | 496 | | | 27.89 | | | 6,98,500 | 4,78,880 | | | 3.18 | | | 5,46,150 | | 3,31,680 | | | | | 2.55 |
|  | Management of late blight in Potato through integrated approach | Kufri Jyothi | - | Irrigated | 5 | 1 | | Under Progress | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flowers | Micronutrient management in marigold | - | Benztall | Irrigated | 3 | 1.2 | |  |  | | |  | |  | | | | |  | |  | | |  | | | |  |  | | | |  | |  | |
| Ornamental |  |  |  |  |  |  | |  |  | | |  | |  | | | | |  | |  | | |  | | | |  |  | | | |  | |  | |
| Fruit | Integrated crop management in mango (2020-21) | Mallika | - | Rainfed | 5 | 2 | | 89.50 | 117.30 | | | 100.25 | | 85.03 | | | | | 17.89 | | 3,00,750 | | | 2,20,730 | | | | 3.75 | 2,55,090 | | | | 1,79,470 | | 3.37 | |
|  | Integrated crop management in mango (2021-22) | Mallika | - | Rainfed | 5 | 2 | | Under Progress | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spices and condiments |  |  |  |  |  |  | |  | |  | | |  | |  | | |  | | |  | | |  | | | |  |  | | | |  | |  | |
| Commercial |  |  |  |  |  |  | |  | |  | | |  | |  | | |  | | |  | | |  | | | |  |  | | | |  | |  | |
| Fibre crops like cotton |  |  |  |  |  |  | |  | |  | | |  | |  | | |  | | |  | | |  | | | |  |  | | | |  | |  | |
| Medicinal and aromatic |  |  |  |  |  |  | |  | |  | | |  | |  | | |  | | |  | | |  | | | |  |  | | | |  | |  | |
| Fodder |  |  |  |  |  |  | |  | |  | | |  | |  | | |  | | |  | | |  | | | |  |  | | | |  | |  | |
| Plantation | Integrated pest management in Cashew | Ullal-3 |  | Rainfed | 5 | 2 | | Under Progress | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Demonstration on Fodder cafeteria for continuous supply of green fodder | - | - | - | 6 | 1.2 | | Under Progress | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibre |  |  |  |  |  |  | |  | |  | |  | | | |  |  | | |  | | | |  | | |  | | |  | |  | |  | | |
| Sericulture | Recycling of Seri farm residue with waste decomposer consortia for quality compost production | - | - | Irrigated | 5 | 5 units | | 42.3 | | 37.1 | | 39.5 | | | | 9.5 | 243.41 | | | 7890 | | | | 6640 | | | 6.31 | | | 1900 | | 900 | | 1.90 | | |
|  | Management of uzifly in silkworm rearing | - | - |  | 10 | 1000  dfls | | 0.996 | | 0.916 | | 0.944 | | | | 0.801 | 17.70 | | | 38,272 | | | | 27,222 | | | 3.46 | | | 30,701 | | 20,201 | | 2.92 | | |
|  | Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in mulberry | - | V-1 | - | 5 | 1 | 112.5 | | | 95 | 103.75 | | | | | 95 | 10.92 | | | 51,875 | | | | | 41,875 | | 5.18 | | | 47,500 | | 37,500 | | 4.75 | | |
| Home science | Introduction of potential crop chia for balanced diet | - | - | Rainfed | 8 | 1.5 | 2.5 | | | 2.0 | | 2.25 | | | | - | - | | | 2,00,000 | | | | 1,50,000 | | | 25 | | | - | | - | | - | | |

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

\*\* BCR= GROSS RETURN/GROSS COST

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

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

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demo** | **Check** |
| **Management of stem rot disease in Groundnut** | | |
| Scelrotium rot(%) | 11.00 | 28.12 |
| **Introduction of BRG-4in redgram & Disease and Pest** | | |
| Leaf webber incidence (%) | 4.35 | 9.20 |
| % sterility mosaic disease (%) | 3.85 | 11.35 |
| Pod borer incidence (%) | 5.5 | 10.25 |
| **Integrated Crop Management in Field bean**  **(Yadahalli)** | | |
| Pod borer (No) | 6.48 | 13.68 |
| Aphids(No) | 7.72 | 16.52 |
| **(Thimmasandra)** | | |
| Pod borer (No) | 7.04 | 17.16 |
| Aphids(No) | 13 | 21.96 |
| **Demonstration of Ragi variety, KMR 630 for drought mitigation and delayed sowings** | | |
| No of tillers (Nos) | 9.22 | 7.10 |
| Plant height (cm) | 78 | 102 |
| No of year heads (Nos) | 9.45 | 7.50 |
| **Integrated crop management in mango (2020-21)** | | |
| Powdery mildew disease incidence (%) | 10.52 | 20.30 |
| Number of leaf hoppers per inflorence (No) | 4.76 | 11.38 |
| Number of fruit flies per trap (No) | 62.69 | - |
| **Integrated management of yellow mosaic virus in pole bean** | | |
| Plant height (m) | 2.20 | 1.87 |
| Number of fruits per plant(No) | 43.55 | 38.64 |
| Fruit length (cm) | 16.68 | 15.46 |
| Mosaic disease incidence(%) | 3.50 | 5.90 |
| **Integrated insect pest and disease management in Tomato** | | |
| Thips (No) | 0.44 | 1.16 |
| Mites(No) | 0.52 | 1.96 |
| Fruit borer(No) | 1.96 | 3.04 |
| South American pin worm(No) | 7.16 | 14.96 |
| Late blight (PDI) | 10.36 | 18.37 |
| **Recycling of seri farm residue with waste decomposer consortia for quality compost production** | | |
| Maturity indices ( No of days taken) | 82.40 | 281 |
| % recovery on weight basis | 89.05 | 73.90 |
| Compost yield (Kg/ton) | 891 | 739 |
| Compost production per year(No) | 4.43 | 1.29 |
| Compost yield (t/ha) | 17.81 | 3.82 |
| **Management of uzifly (Exorista bombycis) in silkworm rearing** | | |
| No of uzifly trapped (No’s) | 140 | 0 |
| Uzi fly infested silkworm (%) | 0.67 | 5.73 |
| Defective cocoon (%) | 0.24 | 1.49 |

5. B2. Feedback on technologies demonstrated

| Name of technology demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
| --- | --- | --- |
| Management of stem rot disease in Groundnut | In bioagents treated plots incidence of disease was reduced good quality of yield produced | - |
| Integrated crop management in mango | Increase in the quality and quantity of yield with less percentage of damaged fruits | Unmanaged orchards from years |
| Integrated management of yellow mosaic virus in pole bean | Increased in the yield | - |
| Integrated crop management in mango | Increase in the quality and quantity of yield with less percentage of damaged fruits | Unmanaged orchards from years |
| Integrated management of yellow mosaic virus in pole bean | Increased in the yield | - |
| Introduction of BRG-4in redgram & Disease and Pest | Accepted by farmer for dual purpose | - |
| Demonstration of Ragi variety, KMR 630 for drought mitigation and delayedsowings | Farmers are happy with short duration vairty | - |
| Demonstration of silage techniques for decreasing inter-calving period & better milk production | Farmers are happy with increase in milk yield & reduction in fodder cost | - |
| Demonstration of Azolla production for enhancing milk yield | Farmers are happy with increase in milk yield & reduction in fodder cost | - |
| Demonstration on Fodder cafeteria for continuous supply of green fodder | Farmers are happy with different number of fodder sources & observed high utilization of fodder by animals | - |
| Recycling of Seri farm residue with waste decomposer consortia for quality compost production | Seri farm residue treated with waste decomposer solution decomposed waste material in short time (82 days) compare to farmer practice (281 days).  Production of compost (3.95 t/year) compare to farmer practices (0.95 t/year ) and produced compost yield 243.41 % over farmer practice  Easy mass multiplication and eco friendly in nature | Lack of knowledge on proper utilization of seri farm residue in scientific way |
| Management of uzifly (*Exorista bombycis* ) in silkworm rearing | Installation of sex pheromone traps near doors and windows of silkworm rearing trapped more uzifly (140 number/trap) .  Reduced defective cocoons percent (0.24%) compare to farmer practice (1.49 %)  Increased returns up to 34.75% over farmer practice | Lack of knowledge on proper management of uzifly in silkworm rearing |

5.B.3. Livestock and related enterprises :

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of livestock | Name of the technology demonstrated | Breed | No. of Demo | No.  of Units | Name of the parameter with unit | Yield (lit/animal) | | | | % Increase | \*Economics of demonstration Rs./unit) | | | \*Economics of check  (Rs./unit) | | |
| Demo | | | Check if any | Gross  Return | Net Return | \*\*  BCR | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  |  | H | L | A |  |  |
| Dairy | Demonstration of silage techniques for decreasing inter-calving period & better milk production | HF cows | 15 | 15  Units | Under Progress | | | | | | | | | | | |
|  | Demonstration of Azolla production for enhancing milk yield | HF cows | 15 | 15  Units | Under Progress | | | | | | | | | | | |
| Poultry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rabbitry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigerry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sheep and goat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duckery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

\*\* BCR= Gross Return/Gross Cost

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

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

5. B4. Feedback on livestock technologies demonstrated

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

5.B.5. Fisheries

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

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

\*\* BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

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

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

5. B6. Feedback on fisheries technologies demonstrated

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

5.B.7. Other enterprises

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Enterprise | Name of the technology demonstrated | Variety/ species | No. of Demo | Units/ Area {m2} | Name of the parameter with unit | Yield | | | | % Increase | \*Economics of demonstration (Rs./unit) or (Rs./m2) | | | \*Economics of check  (Rs./unit) or (Rs./m2) | | |
| Demo | | | Check if any | Gross  Return | Net Return | \*\*  BCR | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  |  | H | L | A |  |  |
| Oyster mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Button mushroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vermicompost |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sericulture | Recycling of Seri farm residue with waste decomposer consortia for quality compost production | - | 5 | 02 | Compost Production (t/yr) | 42.3 | 37.1 | 39.5 | 9.5 | 243.41 | 7890 | 6640 | 6.31 | 1900 | 900 | 1.90 |
|  | Management of uzifly in silkworm rearing | - | 10 | 05 | Cocoon Yield (Kg/100 dfls) | 0.996 | 0.916 | 0.944 | 0.801 | 17.70 | 38272 | 27222 | 3.46 | 30701 | 20201 | 2.92 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apiculture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

\*\* BCR= Gross Return/Gross Cost

H-High L-Low, A-Average

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

|  |  |  |
| --- | --- | --- |
| **Data on other parameters in relation to technology demonstrated** | | |
| **Parameter with unit** | **Demo** | **Local** |
| **Recycling of seri farm residue with waste decomposer consortia for quality compost production** | | |
| Maturity indices ( No of days taken) | 82.40 | 281 |
| % recovery on weight basis | 89.05 | 73.90 |
| Compost yield (Kg/ton) | 891 | 739 |
| Compost production per year(No) | 4.43 | 1.29 |
| Compost yield (t/ha) | 17.81 | 3.82 |
| **Management of uzifly (Exorista bombycis) in silkworm rearing** | | |
| No of uzifly trapped(Nos) | 140 | 0 |
| Uzifly infested silkworm(%) | 0.67 | 5.73 |
| Defective cocoon(%) | 0.24 | 1.49 |

5. B8. Feedback on enterprises demonstrated

|  |  |  |
| --- | --- | --- |
| Name of enterprise demonstrated | Useful characters as well as constraints of technology | Socio-economic as well as administrative constraints for its adoption |
| Recycling of Seri farm residue with waste decomposer consortia for quality compost production | Seri farm residue treated with waste decomposer solution decomposed waste material in short time (82 days) compare to farmer practice (281 days).  Production of compost (3.95 t/year) compare to farmer practices (0.95 t/year ) and produced compost yield 243.41 % over farmer practice  Easy mass multiplication and eco friendly in nature | Lack of knowledge on proper utilization of seri farm residue in scientific way |
| Management of uzifly (*Exorista bombycis* ) in silkworm rearing | Installation of sex pheromone traps near doors and windows of silkworm rearing trapped more uzifly (140 number/trap) .  Reduced defective cocoons percent (0.24%) compare to farmer practice (1.49 %)  Increased returns up to 34.75% over farmer practice | Lack of knowledge on proper management of uzifly in silkworm rearing |

5.B.9. Farm implements and machinery

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

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

\*\* BCR= Gross Return/Gross Cost

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

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

5. B10. Feedback on farm implements demonstrated

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Activity** | **No. of activities organised** | **Number of participants** | **Remarks** |
| 1 | Field days | 11 | 456 |  |
| 2 | Farmers Training | 18 | 4346 |  |
| 3 | Media coverage | 82 | - |  |
| 4 | Training for extension functionaries | 3 | 165 |  |
| 5 | Others (Please specify) | - | - |  |

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS**

**Demonstration details on crop hybrids**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Breed | Name of the technology demonstrated | Name of the hybrid | No. of Demo | Area (ha) | Yield (q/ha) | | | | | % Increase | \*Economics of demonstration (Rs./ha) | | | \*Economics of check  (Rs./ha) | | |
| Demo | | | Check | | Gross  Return | Net Return | \*\*  BCR | Gross  Return | Net Return | \*\*  BCR |
|  |  |  |  |  | H | L | A |  | |  |
| **Cereals** |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Bajra |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Maize |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Paddy |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Sorghum |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Wheat |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| **Oilseeds** |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Castor |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Mustard |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Safflower |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Sesame |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Sunflower |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Groundnut |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Soybean |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| **Pulses** |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Greengram |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Blackgram |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Bengalgram |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Redgram |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| **Vegetable crops** |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Bottle gourd |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Capsicum |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Cucumber |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Tomato | Integrated insect pest and disease management in Tomato | Saaho | 5 | 1 | 66.0 | 60.5 | 63.5 | 49.65 | | 27.89 | 6,98,500 | 4,78,880 | 3.18 | 5,46,150 | 3,31,680 | 2.55 |
| Brinjal |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Okra |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Onion |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Potato |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Field bean |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |
| Others (pl.specify) | Micronutrient management in marigold | Benztall | 3 | 1.2 | Under progress | | | | | | | | | | | |
| Total |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| **Commercial crops** | Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in mulberry | V-1 | 5 | 1 | Under progress | | | | | | | | | | | |
| Sugarcane |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Coconut |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Fodder crops |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Maize |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Sorghum (Fodder) |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |

H-High L-Low, A-Average

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

Feedback on crop hybrids demonstrated

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

1. **Farmer Field School : Integrated pest and disease management in cabbage.**

**Problem:** Non adoption of integrated approaches in management of pests and diseases.

**Technologies demonstrated:**

1. Sowing of antagonistic crop: mustard after 25 lines of cabbage and also in border
2. Role of bioagents in agriculture
3. Role of parasitioids in the management of cabbage pests
4. Role of pheromone trap for the management of DBM
5. Role of lighttrap for the management of DBM

**Place: Yadahalli, Kolar tq, Kolar dist.**

**Results:**

|  |  |  |
| --- | --- | --- |
| **Parameters** | **Demo** | **Check** |
| DBM (no/Plant) | 1.4 | 3.2 |
| Aphids | 0.8 | 1.8 |
| Alternaria blight (%) | 0.8 | 4.6 |
| Gross cost (Rs./ha) | 125000 | 120000 |
| Gross Return (Rs./ha) | 350000 | 236000 |
| Net Return (Rs./ha) | 225000 | 116000 |
| B:C Ratio (Rs.) | 2.80 | 1.96 |

**Farmers feed back:**

Harvested good quality of heads.

Reduced pest incidence

Increased yield about 15%

1. **Farmer Field School : Enhancing Cocoon Yield through *Trenching and Mulching* practices in mulberry cultivation**

**Problem:** Depletion of soil nutrients, improper organic nutrient management, poor quality and quantity of mulberry leaves, poor quality cocoon

**Technologies demonstrated**

* Insitu soil moisture conservation
* Balanced nutrient management
* Waste decomposer application
* IPM practices
* Weed management
* Scientific rearing techniques

**Source:** CSR&TI, Mysore/ UAS (B) **Place :** Muthanuru, Bangarpet taluk, Kolar Dist

**Results :**

|  |  |  |
| --- | --- | --- |
| **Parameters** | **Demo** | **Check** |
| No. of braches/Plant (No) | 16.52 | 14.60 |
| No. of leaves / braches (No) | 27.60 | 24.30 |
| Leaf moisture percentage (%) | 77.53 | 75.80 |
| Moisture retention capacity after 6 hr (%) | 84.56 | 82.12 |
| Leaf yield (Kg/plant) | 1.225 | 0.950 |
| Leaf yield (q/ha/crop) | 120.65 | 90.78 |
| Cocoon yield (kg/ha dfls) | 93.97 | 85.14 |
| Cocoon yield (kg/ha) | 453.64 | 338.65 |
| % increases over check | 32.90 % | |
| Gross cost (Rs./ha) | 58000 | 50500 |
| Gross Return (Rs./ha) | 181450 | 135460 |
| Net Return (Rs./ha) | 123450 | 84960 |
| B:C Ratio (Rs.) | 3.12 | 2.68 |

**Farmers feedback :**

* Increased leaf yield upto 32.90% over farmer practice
* Enhanced soil nutrients and leaf nutrients in demonstrated plot over farmer practice
* Increased returns up to 45.30 % over farmer practice

**Demonstration of Nutrigarden to farm Families 2021-22 Village:** Shyagathutu, Srnivasapura Tq

No Of farm families: 25

**Table 1.a) Socio Economic Condition** **Table 1.b) Nutri Garden Avg. Yield in Kharif Season**

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Respondents=25 | | |
| Persons=155 | | % |
| Age (Years) | | | |
| 0-19 | 36 | 23.22 | |
| 20-39 | 39 | 25.16 | |
| 40-59 | 62 | 40.00 | |
| >60 | 18 | 11.61 | |
| Caste | | | |
| SC/ST | 51 | 32.90 | |
| Others | 101 | 65.16 | |
| Respondents related to Education:25 | | | |
| Illitrates | 20 | 12.90 | |
| Primary School | 32 | 20.64 | |
| High School | 24 | 15.48 | |
| College | 12 | 7.74 | |
| Farmers Income            Respondents=25 | | | |
| 11,000-50,000 | 21 | 84.00 | |
| 51,000-90,000 | 06 | 24.00 | |
| >91,000 | 05 | 20.00 | |
| Nutrigarden respondents=25 | | | |
| > 3 yeras | 11 | 44.00 | |
| < 3 Yeras | 14 | 56.00 | |
| Nutrigarden Growers advantage respondents=24 | | | |
| Econiomic advantage | 04 | 16.66 | |
| Family Health | 16 | 66.66 | |
| Pleasure | 04 | 16.66 | |

|  |  |  |  |
| --- | --- | --- | --- |
| Crops | Yeild (Kg) | Consumption (Kg) | Sale (Kg) |
| Beetroot | 18 | 14 | 04 |
| Beans | 21 | 14 | 07 |
| Brinjal | 24.5 | 15.5 | 09 |
| Gaurd | 17 | 12 | 05 |
| Bhendi | 24 | 17 | 07 |
| Onion | 23 | 18 | 05 |
| Cabbage | 29 | 19 | 10 |
| Chilli | 16 | 12 | 04 |
| Tomato | 41 | 37 | 04 |
| Palak (Bundle) | 28 | 28 | 00 |
| Amaranthus(Bundle) | 32 | 28 | 04 |
| Methi (Bundle) | 29 | 24 | 05 |
| **Total** | **302.5** | **238.5** | **64** |

**Table .1.c) Nutri garden Avg. Yield in Rabi season**

|  |  |  |  |
| --- | --- | --- | --- |
| Crops | Yeild (Kg) | Consumption (Kg) | Sale (Kg) |
| Beans | 18 | 12 | 06 |
| Chilli | 17 | 14 | 03 |
| Carrot | 19 | 14 | 05 |
| Gaurd | 22 | 16 | 06 |
| Brinjal | 22 | 14 | 08 |
| Onion | 25 | 16 | 09 |
| Bittergaurd | 19 | 17.5 | 1.50 |
| Bhendi | 27 | 22 | 05 |
| Tomato | 31 | 28 | 03 |
| Palak (Bundle) | 19 | 17 | 02 |
| Amaranthus(Bundle) | 22 | 19 | 03 |
| Leafy vegetable | 28 | 28 | 00 |
| Sabsige | 27 | 27 | 00 |
| Chakotha | 37 | 28 | 09 |
| Total | 333 | 272.5 | 660.5 |

**Table 1.d) Impact of Nutrigarden on farmers families food consumption**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl.No | Food group | Avg. consumption (Cups) | | Amount Spent (RS) | |
| Before | After | Before | After |
| 01 | Cereals | 4.00 | 4.20 | 3200 | 3400 |
| 02 | Minor Millets | 1.85 | 2.65 | 3200 | 4100 |
| 03 | Pulses | 2.50 | 3.20 | 4300 | 5200 |
| 04 | Yellow and Red fruits and vegetables | 0.48 | 1.20 | 1750 | 580 |
| 05 | Green leafy vegetables | 1.45 | 3.16 | 1600 | 480 |
| 06 | Tuber crops | 3.75 | 5.56 | 3900 | 950 |
| 07 | Others vegetables | 5.54 | 7.25 | 2500 | 580 |
| 08 | Milk and Milk products | 1.95 | 3.56 | 2900 | 3300 |
| 09 | Meat\* | 3.54 | 2.76 | 5900 | 3200 |
| 10 | Egg | 3.23 | 4.63 | 1500 | 1950 |
| 11 | Fish\* | 0.84 | 1.95 | 750 | 1650 |
| 12 | Sprouted Cereals | 1.15 | 2.68 | 500 | 1950 |
| 13 | Fat | 2.15 | 0.76 | 3900 | 2400 |
| 14 | Oil seeds | 1.44 | 1.95 | 2400 | 2300 |
| 15 | Processed foods | 1.97 | 0.84 | 2100 | 950 |
|  | Total | 35.84 | 46.35 | 40400 | 32990 |

**PART VII. TRAINING**

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

| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Crop Production** |  |  |  |  |  |  |  |  |  |  |
| Weed Management | 1 | 22 | 5 | 27 | 6 | 2 | 8 | 28 | 7 | 35 |
| Resource Conservation Technologies |  |  |  |  |  |  |  |  |  |  |
| Cropping Systems | 1 | 70 | 21 | 91 | 10 | 4 | 14 | 80 | 25 | 105 |
| Crop Diversification |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming | 1 | 12 | - | 12 | 3 | 0 | 3 | 15 | 0 | 15 |
| Micro Irrigation/Irrigation |  |  |  |  |  |  |  |  |  |  |
| Seed production |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management | 1 | 30 | 8 | 38 | 5 | 2 | 7 | 35 | 10 | 45 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 1 | 32 | 8 | 40 | 3 | 2 | 5 | 35 | 10 | 45 |
| Production of organic inputs | 1 | 33 | 13 | 46 | 7 | 2 | 9 | 40 | 15 | 55 |
| Others (pl.specify) organic nutrient management | 1 | 50 | 0 | 50 | 10 | 0 | 10 | 60 | 0 | 60 |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop | 1 | 30 | 0 | 30 | 5 | 0 | 5 | 35 | 0 | 35 |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising | 1 | 72 | 0 | 72 | 3 | 0 | 3 | 75 | 0 | 75 |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization | 1 | 30 | 5 | 35 | 5 | 0 | 5 | 35 | 5 | 40 |
| Protective cultivation | 1 | 30 | 7 | 37 | 5 | 2 | 7 | 35 | 9 | 44 |
| Others (pl.specify) Agriculture environment | 1 | 18 | 7 | 25 | 2 | 3 | 5 | 20 | 10 | 30 |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning |  |  |  |  |  |  |  |  |  |  |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 1 | 200 | 50 | 250 | 40 | 10 | 50 | 240 | 60 | 300 |
| Management of young plants/orchards | 1 | 30 | 3 | 33 | 6 | 1 | 7 | 36 | 4 | 40 |
| Rejuvenation of old orchards |  |  |  |  |  |  |  |  |  |  |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management |  |  |  |  |  |  |  |  |  |  |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology | 1 | 40 | 10 | 50 | 6 | 4 | 10 | 46 | 14 | 60 |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) (Sandal wood cultivation) | 1 | 20 | 5 | 25 | 8 | 2 | 10 | 28 | 7 | 35 |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology | 2 | 35 | 17 | 52 | 5 | 3 | 8 | 40 | 20 | 60 |
| Processing and value addition | 1 | 28 | 3 | 31 | 4 | 0 | 4 | 32 | 3 | 35 |
| 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 | 1 | 85 | 15 | 100 | 5 | 5 | 10 | 90 | 20 | 110 |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management | 4 | 190 | 33 | 223 | 18 | 9 | 27 | 208 | 42 | 250 |
| Production and use of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops | 1 | 35 | 5 | 40 | 3 | 2 | 5 | 38 | 7 | 45 |
| Nutrient use efficiency | 1 | 175 | 20 | 195 | 50 | 16 | 66 | 225 | 36 | 261 |
| Balanced use of fertilizers | 2 | 272 | 55 | 327 | 31 | 12 | 43 | 303 | 67 | 370 |
| Soil and water testing | 3 | 226 | 35 | 261 | 19 | 10 | 29 | 245 | 45 | 290 |
| Others (pl.specify) (Organic farming) | 1 | 53 | 11 | 64 | 2 | 4 | 6 | 55 | 15 | 70 |
| World honey bee day | 1 | 85 | 15 | 100 | 8 | 2 | 10 | 93 | 17 | 110 |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management | 1 | 25 | 5 | 30 | 4 | 1 | 5 | 29 | 6 | 35 |
| 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 | 70 | 70 | 0 | 5 | 5 | 0 | 75 | 75 |
| Designing and development for high nutrient efficiency diet | 1 | 55 | 25 | 80 | 5 | 4 | 9 | 60 | 29 | 89 |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking | 1 | 20 | 50 | 70 | 5 | 5 | 10 | 25 | 55 | 80 |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition | 1 | 5 | 30 | 35 | 5 | 2 | 7 | 10 | 32 | 42 |
| Women empowerment |  |  |  |  |  |  |  |  |  |  |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance | 1 | 28 | 2 | 30 | 6 | 4 | 10 | 34 | 6 | 40 |
| 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) Sustainable Agriculture | 1 | 250 | 70 | 320 | 53 | 20 | 73 | 303 | 90 | 393 |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 2 | 160 | 60 | 220 | 55 | 25 | 80 | 215 | 85 | 300 |
| Integrated Disease Management | 2 | 18 | 5 | 23 | 6 | 1 | 7 | 24 | 6 | 30 |
| Bio-control of pests and diseases | 1 | 22 | 8 | 30 | 3 | 2 | 5 | 25 | 10 | 35 |
| Production of bio control agents and bio pesticides | 2 | 48 | 16 | 64 | 7 | 4 | 11 | 55 | 20 | 75 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| Weed management | 1 | 20 | 5 | 25 | 6 | 4 | 10 | 26 | 9 | 35 |
| **Fisheries** |  |  |  |  |  |  |  |  |  |  |
| Integrated fish farming |  |  |  |  |  |  |  |  |  |  |
| Carp breeding and hatchery management |  |  |  |  |  |  |  |  |  |  |
| Carp fry and fingerling rearing |  |  |  |  |  |  |  |  |  |  |
| Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| Hatchery management and culture of freshwater prawn |  |  |  |  |  |  |  |  |  |  |
| Breeding and culture of ornamental fishes |  |  |  |  |  |  |  |  |  |  |
| Portable plastic carp hatchery |  |  |  |  |  |  |  |  |  |  |
| Pen culture of fish and prawn |  |  |  |  |  |  |  |  |  |  |
| Shrimp farming |  |  |  |  |  |  |  |  |  |  |
| Edible oyster farming |  |  |  |  |  |  |  |  |  |  |
| Pearl culture |  |  |  |  |  |  |  |  |  |  |
| Fish processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| Seed Production |  |  |  |  |  |  |  |  |  |  |
| Planting material production |  |  |  |  |  |  |  |  |  |  |
| Bio-agents production |  |  |  |  |  |  |  |  |  |  |
| Bio-pesticides production |  |  |  |  |  |  |  |  |  |  |
| Bio-fertilizer production |  |  |  |  |  |  |  |  |  |  |
| Vermi-compost production |  |  |  |  |  |  |  |  |  |  |
| Organic manures production |  |  |  |  |  |  |  |  |  |  |
| Production of fry and fingerlings |  |  |  |  |  |  |  |  |  |  |
| Production of Bee-colonies and wax sheets |  |  |  |  |  |  |  |  |  |  |
| Small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Production of livestock feed and fodder |  |  |  |  |  |  |  |  |  |  |
| Production of Fish feed |  |  |  |  |  |  |  |  |  |  |
| Mushroom production |  |  |  |  |  |  |  |  |  |  |
| Apiculture |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Capacity Building and Group Dynamics** |  |  |  |  |  |  |  |  |  |  |
| Leadership development |  |  |  |  |  |  |  |  |  |  |
| Group dynamics |  |  |  |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Mobilization of social capital |  |  |  |  |  |  |  |  |  |  |
| Entrepreneurial development of farmers/youths |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies | 1 | 20 | 10 | 30 | 5 | 0 | 5 | 25 | 10 | 35 |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems |  |  |  |  |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **Sericulture** | 1 | 45 | 0 | 45 | 5 | 0 | 5 | 50 | 0 | 50 |
| Disease management in mulberry | 2 | 90 | 0 | 90 | 9 | 0 | 9 | 99 | 0 | 99 |
| Doubling the farmers income | 4 | 290 | 17 | 307 | 19 | 4 | 23 | 309 | 21 | 330 |
| Cultivation practices in mulberry | 1 | 50 | 10 | 60 | 8 | 2 | 10 | 58 | 12 | 70 |
| Mulberry cultivation |  |  |  |  |  |  |  |  |  |  |
| Disease management |  |  |  |  |  |  |  |  |  |  |
| Organic technologies in mulberry | 1 | 72 | 0 | 72 | 3 | 0 | 3 | 75 | 0 | 75 |
| FAPs on importance of weather forecasting in agriculture and weather based mobile applications used in agriculture | 12 | 382 | 173 | 555 | 48 | 28 | 76 | 430 | 201 | 631 |
| **TOTAL** | **70** | **3503** | **907** | **4410** | **521** | **208** | **729** | **4024** | **1115** | **5139** |

**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 | 1 | 18 | 0 | 18 | 2 | 0 | 2 | 20 | 0 | 20 |
| Soil and Water Conservation |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 1 | 30 | 5 | 35 | 5 | 0 | 5 | 35 | 5 | 40 |
| Production of organic inputs |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Horticulture** |  |  |  |  |  |  |  |  |  |  |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |  |  |
| Production of low value and high volume crop |  |  |  |  |  |  |  |  |  |  |
| Off-season vegetables |  |  |  |  |  |  |  |  |  |  |
| Nursery raising |  |  |  |  |  |  |  |  |  |  |
| Exotic vegetables |  |  |  |  |  |  |  |  |  |  |
| Export potential vegetables |  |  |  |  |  |  |  |  |  |  |
| Grading and standardization |  |  |  |  |  |  |  |  |  |  |
| Protective cultivation | 2 | 55 | 5 | 60 | 9 | 1 | 10 | 64 | 6 | 70 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **b) Fruits** |  |  |  |  |  |  |  |  |  |  |
| Training and Pruning | 1 | 13 | 3 | 16 | 2 | 2 | 4 | 15 | 5 | 20 |
| Layout and Management of Orchards |  |  |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 1 | 30 | 13 | 43 | 5 | 2 | 7 | 35 | 15 | 50 |
| Management of young plants/orchards |  |  |  |  |  |  |  |  |  |  |
| Rejuvenation of old orchards | 1 | 20 | 5 | 25 | 5 | 0 | 5 | 25 | 5 | 30 |
| Export potential fruits |  |  |  |  |  |  |  |  |  |  |
| Micro irrigation systems of orchards |  |  |  |  |  |  |  |  |  |  |
| Plant propagation techniques | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 30 | 0 | 30 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery Management |  |  |  |  |  |  |  |  |  |  |
| Management of potted plants |  |  |  |  |  |  |  |  |  |  |
| Export potential of ornamental plants |  |  |  |  |  |  |  |  |  |  |
| Propagation techniques of Ornamental Plants |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **d) Plantation crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **f) Spices** |  |  |  |  |  |  |  |  |  |  |
| Production and Management technology |  |  |  |  |  |  |  |  |  |  |
| Processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **g) Medicinal and Aromatic Plants** |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Production and management technology |  |  |  |  |  |  |  |  |  |  |
| Post harvest technology and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |  |  |
| Soil fertility management | 1 | 33 | 14 | 47 | 2 | 1 | 3 | 35 | 15 | 50 |
| Integrated water management |  |  |  |  |  |  |  |  |  |  |
| Integrated nutrient management | 1 | 41 | 8 | 49 | 4 | 2 | 6 | 45 | 10 | 55 |
| Production and use of organic inputs | 1 | 35 | 8 | 43 | 5 | 2 | 7 | 40 | 10 | 50 |
| Management of Problematic soils |  |  |  |  |  |  |  |  |  |  |
| Micro nutrient deficiency in crops | 1 | 35 | 16 | 51 | 5 | 4 | 9 | 40 | 20 | 60 |
| Nutrient use efficiency | 1 | 35 | 9 | 44 | 5 | 1 | 6 | 40 | 10 | 50 |
| Balanced use of fertilizers |  |  |  |  |  |  |  |  |  |  |
| Soil and water testing | 2 | 128 | 23 | 151 | 17 | 7 | 24 | 145 | 30 | 175 |
| World soil day | 1 | 225 | 85 | 310 | 25 | 15 | 40 | 250 | 100 | 350 |
| Others (pl.specify) Brucellosis management | 1 | 25 | - | 25 | 5 | - | 5 | 30 | 0 | 30 |
| **Livestock Production and Management** |  |  |  |  |  |  |  |  |  |  |
| Dairy Management |  |  |  |  |  |  |  |  |  |  |
| Poultry Management |  |  |  |  |  |  |  |  |  |  |
| Piggery Management |  |  |  |  |  |  |  |  |  |  |
| Rabbit Management |  |  |  |  |  |  |  |  |  |  |
| Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| Feed and Fodder technology |  |  |  |  |  |  |  |  |  |  |
| Production of quality animal products |  |  |  |  |  |  |  |  |  |  |
| Others (Brucellosis management) | 4 | 40 | 5 | 45 | 60 | 55 | 115 | 100 | 60 | 160 |
| **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 | 1 | 20 | 15 | 35 | 5 | 4 | 9 | 25 | 19 | 44 |
| Minimization of nutrient loss in processing |  |  |  |  |  |  |  |  |  |  |
| Processing and cooking |  |  |  |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  |  |  |  |  |  |  |  |  |
| Storage loss minimization techniques |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Women empowerment | 1 | 20 | 30 | 50 | 7 | 4 | 11 | 27 | 34 | 61 |
| Location specific drudgery production |  |  |  |  |  |  |  |  |  |  |
| Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| Women and child care |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) (Poshan Abhiyan) | 4 | 88 | 147 | 235 | 10 | 10 | 20 | 98 | 157 | 255 |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| **Agril. Engineering** |  |  |  |  |  |  |  |  |  |  |
| Farm machinery and its maintenance |  |  |  |  |  |  |  |  |  |  |
| Installation and maintenance of micro irrigation systems |  |  |  |  |  |  |  |  |  |  |
| Use of Plastics in farming practices |  |  |  |  |  |  |  |  |  |  |
| Production of small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Repair and maintenance of farm machinery and implements |  |  |  |  |  |  |  |  |  |  |
| Small scale processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Plant Protection** |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 3 | 83 | 23 | 106 | 9 | 3 | 12 | 92 | 26 | 118 |
| Integrated Disease Management | 2 | 20 | 15 | 35 | 4 | 3 | 7 | 24 | 18 | 42 |
| Bio-control of pests and diseases | 3 | 86 | 24 | 110 | 14 | 6 | 20 | 100 | 30 | 130 |
| Production of bio control agents and bio pesticides |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Fisheries** |  |  |  |  |  |  |  |  |  |  |
| Integrated fish farming |  |  |  |  |  |  |  |  |  |  |
| Carp breeding and hatchery management |  |  |  |  |  |  |  |  |  |  |
| Carp fry and fingerling rearing |  |  |  |  |  |  |  |  |  |  |
| Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| Hatchery management and culture of freshwater prawn |  |  |  |  |  |  |  |  |  |  |
| Breeding and culture of ornamental fishes |  |  |  |  |  |  |  |  |  |  |
| Portable plastic carp hatchery |  |  |  |  |  |  |  |  |  |  |
| Pen culture of fish and prawn |  |  |  |  |  |  |  |  |  |  |
| Shrimp farming |  |  |  |  |  |  |  |  |  |  |
| Edible oyster farming |  |  |  |  |  |  |  |  |  |  |
| Pearl culture |  |  |  |  |  |  |  |  |  |  |
| Fish processing and value addition |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Production of Inputs at site** |  |  |  |  |  |  |  |  |  |  |
| Seed Production |  |  |  |  |  |  |  |  |  |  |
| Planting material production |  |  |  |  |  |  |  |  |  |  |
| Bio-agents production |  |  |  |  |  |  |  |  |  |  |
| Bio-pesticides production |  |  |  |  |  |  |  |  |  |  |
| Bio-fertilizer production |  |  |  |  |  |  |  |  |  |  |
| Vermi-compost production |  |  |  |  |  |  |  |  |  |  |
| Organic manures production |  |  |  |  |  |  |  |  |  |  |
| Production of fry and fingerlings |  |  |  |  |  |  |  |  |  |  |
| Production of Bee-colonies and wax sheets |  |  |  |  |  |  |  |  |  |  |
| Small tools and implements |  |  |  |  |  |  |  |  |  |  |
| Production of livestock feed and fodder |  |  |  |  |  |  |  |  |  |  |
| Production of Fish feed |  |  |  |  |  |  |  |  |  |  |
| Mushroom production |  |  |  |  |  |  |  |  |  |  |
| Apiculture |  |  |  |  |  |  |  |  |  |  |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Capacity Building and Group Dynamics** |  |  |  |  |  |  |  |  |  |  |
| Leadership development |  |  |  |  |  |  |  |  |  |  |
| Group dynamics |  |  |  |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  |  |  |  |  |  |  |  |  |
| Mobilization of social capital |  |  |  |  |  |  |  |  |  |  |
| Entrepreneurial development of farmers/youths | 2 | 120 | 20 | 140 | 20 | 5 | 25 | 140 | 25 | 165 |
| Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **Agro-forestry** |  |  |  |  |  |  |  |  |  |  |
| Production technologies |  |  |  |  |  |  |  |  |  |  |
| Nursery management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming Systems |  |  |  |  |  |  |  |  |  |  |
| Others (Pl. specify) |  |  |  |  |  |  |  |  |  |  |
| **Sericulture** | 4 | 90 | 41 | 131 | 20 | 9 | 29 | 110 | 50 | 160 |
| Integrated crop management | 6 | 295 | 92 | 387 | 45 | 18 | 63 | 340 | 110 | 450 |
| Cultivation practices | 4 | 205 | 33 | 238 | 25 | 7 | 32 | 230 | 40 | 270 |
| Production management | 3 | 90 | 14 | 104 | 15 | 1 | 16 | 105 | 15 | 120 |
| Pest & disease management | 3 | 145 | 14 | 159 | 18 | 3 | 21 | 163 | 17 | 180 |
| FAPs on importance of weather forecasting in agriculture and weather based mobile applications used in agriculture | 2 | 140 | 20 | 160 | 5 | 5 | 10 | 145 | 25 | 170 |
| **TOTAL** | **59** | **2190** | **687** | **2877** | **358** | **170** | **528** | **2548** | **857** | **3405** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | | | |
| **General** | | | | | | **SC/ST** | | | | **Grand Total** | | |
| **Male** | **Female** | | **Total** | | | **Male** | | **Female** | **Total** | **Male** | **Female** | **Total** |
| Nursery Management of Horticulture crops |  |  | |  | |  | |  | |  |  |  |  |  |
| Training and pruning of orchards |  |  | |  | |  | |  | |  |  |  |  |  |
| Protected cultivation of vegetable crops |  |  | |  | |  | |  | |  |  |  |  |  |
| Commercial fruit production |  |  | |  | |  | |  | |  |  |  |  |  |
| Integrated farming |  |  | |  | |  | |  | |  |  |  |  |  |
| Seed production |  |  | |  | |  | |  | |  |  |  |  |  |
| Production of organic inputs |  |  | |  | |  | |  | |  |  |  |  |  |
| Planting material production |  |  | |  | |  | |  | |  |  |  |  |  |
| Vermi-culture |  |  | |  | |  | |  | |  |  |  |  |  |
| Mushroom Production |  |  | |  | |  | |  | |  |  |  |  |  |
| Bee-keeping |  |  | |  | |  | |  | |  |  |  |  |  |
| Sericulture | 3 | 147 | | 11 | | 158 | | 22 | | 3 | 25 | 169 | 14 | 183 |
| 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)  (Mulberry cultivation & silkworm rearing) | 2 | 85 | | 13 | | 98 | | 24 | | 8 | 32 | 109 | 21 | 130 |
| **TOTAL** | **5** | **232** | | **24** | | **256** | **46** | | **11** | | **57** | **278** | **35** | **313** |

**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 | 2 | 125 | | 0 | | 125 | | 15 | | 0 | | 15 | | 140 | | 0 | | 140 |
| Repair and maintenance of farm machinery and implements |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Value addition |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Small scale processing |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Post Harvest Technology |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Tailoring and Stitching |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Rural Crafts |  |  | |  | |  |  | |  | |  | |  | |  | |  | |
| Production of quality animal products |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Dairying |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Sheep and goat rearing |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Quail farming |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Piggery |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Rabbit farming |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Poultry production |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Ornamental fisheries |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Composite fish culture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Freshwater prawn culture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Shrimp farming |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Pearl culture |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Cold water fisheries |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Fish harvest and processing technology |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Fry and fingerling rearing |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| Any other (pl.specify) |  |  | |  | |  | |  | |  | |  | |  | |  | |  |
| **TOTAL** | **2** | **125** | | **0** | | **125** | **15** | | **0** | | **15** | | **140** | | **0** | | **140** | |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | | | |
| **General** | | | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | | **Total** | | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Productivity enhancement in field crops |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  | |  | |  |  |  |  |  |  |  |
| Integrated Nutrient management |  |  | |  | |  |  |  |  |  |  |  |
| Rejuvenation of old orchards |  |  | |  | |  |  |  |  |  |  |  |
| Protected cultivation technology |  |  | |  | |  |  |  |  |  |  |  |
| Production and use of organic inputs |  |  | |  | |  |  |  |  |  |  |  |
| Care and maintenance of farm machinery and implements |  |  | |  | |  |  |  |  |  |  |  |
| Gender mainstreaming through SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Formation and Management of SHGs |  |  | |  | |  |  |  |  |  |  |  |
| Women and Child care |  |  | |  | |  |  |  |  |  |  |  |
| **Low cost and nutrient efficient diet designing** | **2** | **87** | | **49** | | **136** | **13** | **6** | **19** | **100** | **55** | **155** |
| Group Dynamics and farmers organization |  |  | |  | |  |  |  |  |  |  |  |
| Information networking among farmers |  |  | |  | |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  | |  | |  |  |  |  |  |  |  |
| Management in farm animals |  |  | |  | |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  | |  | |  |  |  |  |  |  |  |
| Household food security |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  | |  | |  |  |  |  |  |  |  |
| **Total** | **2** | **87** | | **49** | | **136** | **13** | **6** | **19** | **100** | **55** | **155** |

**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 | 1 | 0 | | 12 | | 12 | 0 | 3 | 3 | 0 | 15 | 15 |
| Low cost and nutrient efficient diet designing |  |  | |  | |  |  |  |  |  |  |  |
| Group Dynamics and farmers organization |  |  | |  | |  |  |  |  |  |  |  |
| Information networking among farmers |  |  | |  | |  |  |  |  |  |  |  |
| Capacity building for ICT application |  |  | |  | |  |  |  |  |  |  |  |
| Management in farm animals |  |  | |  | |  |  |  |  |  |  |  |
| Livestock feed and fodder production |  |  | |  | |  |  |  |  |  |  |  |
| Household food security |  |  | |  | |  |  |  |  |  |  |  |
| Any other (pl.specify) |  |  | |  | |  |  |  |  |  |  |  |
| **Total** | **1** | **0** | | **12** | | **12** | **0** | **3** | **3** | **0** | **15** | **15** |

7.G. Sponsored training programmes conducted

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** | **Crop production and management** |  |  |  |  |  |  |  |  |  |  |
| 1.a. | Increasing production and productivity of crops |  |  |  |  |  |  |  |  |  |  |
| 1.b. | Commercial production of vegetables |  |  |  |  |  |  |  |  |  |  |
| **2** | **Production and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Fruit Plants |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Ornamental plants |  |  |  |  |  |  |  |  |  |  |
| 2.c. | Spices crops |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Soil health and fertility management** |  |  |  |  |  |  |  |  |  |  |
| **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 |  |  |  |  |  |  |  |  |  |  |
| 7.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **8** | **Farm machinery** |  |  |  |  |  |  |  |  |  |  |
| 8.a. | Farm machinery, tools and implements |  |  |  |  |  |  |  |  |  |  |
| 8.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **9.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| **10** | **Livestock production and management** |  |  |  |  |  |  |  |  |  |  |
| 10.a. | Animal Nutrition Management |  |  |  |  |  |  |  |  |  |  |
| 10.b. | Animal Disease Management |  |  |  |  |  |  |  |  |  |  |
| 10.c | Fisheries Nutrition |  |  |  |  |  |  |  |  |  |  |
| 10.d | Fisheries Management |  |  |  |  |  |  |  |  |  |  |
| 10.e. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **11.** | **Home Science** |  |  |  |  |  |  |  |  |  |  |
| 11.a. | Household nutritional security |  |  |  |  |  |  |  |  |  |  |
| 11.b. | Economic empowerment of women |  |  |  |  |  |  |  |  |  |  |
| 11.c. | Drudgery reduction of women |  |  |  |  |  |  |  |  |  |  |
| 11.d. | **Others (pl.specify)** |  |  |  |  |  |  |  |  |  |  |
| **12** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 12.a. | CapacityBuilding and Group Dynamics |  |  |  |  |  |  |  |  |  |  |
| 12.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | **Total** |  |  |  |  |  |  |  |  |  |  |

**Details of sponsoring agencies involved**

**1.**

**2.**

**3.**

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Area of training** | **No. of**  **Courses** | **No. of Participants** | | | | | | | | |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** | **Crop production and management** |  |  |  |  |  |  |  |  |  |  |
| 1.a. | Commercial floriculture |  |  |  |  |  |  |  |  |  |  |
| 1.b. | Commercial fruit production |  |  |  |  |  |  |  |  |  |  |
| 1.c. | Commercial vegetable production |  |  |  |  |  |  |  |  |  |  |
| 1.d. | Integrated crop management | 1 | 30 | 14 | 44 | 5 | 1 | 6 | 35 | 15 | 50 |
| 1.e. | Organic farming |  |  |  |  |  |  |  |  |  |  |
| 1.f. | Others (pl.specify) (PMFME schemes) | 1 | 70 | 90 | 160 | 9 | 7 | 16 | 79 | 97 | 176 |
| **2** | **Post harvest technology and value addition** |  |  |  |  |  |  |  |  |  |  |
| 2.a. | Value addition |  |  |  |  |  |  |  |  |  |  |
| 2.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Livestock and fisheries** |  |  |  |  |  |  |  |  |  |  |
| 3.a. | Dairy farming |  |  |  |  |  |  |  |  |  |  |
| 3.b. | Composite fish culture |  |  |  |  |  |  |  |  |  |  |
| 3.c. | Sheep and goat rearing |  |  |  |  |  |  |  |  |  |  |
| 3.d. | Piggery |  |  |  |  |  |  |  |  |  |  |
| 3.e. | Poultry farming |  |  |  |  |  |  |  |  |  |  |
| 3.f. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **4.** | **Income generation activities** |  |  |  |  |  |  |  |  |  |  |
| 4.a. | Vermi-composting |  |  |  |  |  |  |  |  |  |  |
| 4.b. | Production of bio-agents, bio-pesticides,  bio-fertilizers etc. |  |  |  |  |  |  |  |  |  |  |
| 4.c. | Repair and maintenance of farm machinery  and implements |  |  |  |  |  |  |  |  |  |  |
| 4.d. | Rural Crafts |  |  |  |  |  |  |  |  |  |  |
| 4.e. | Seed production |  |  |  |  |  |  |  |  |  |  |
| 4.f. | Sericulture |  |  |  |  |  |  |  |  |  |  |
| 4.g. | Mushroom cultivation | 1 | 0 | 13 | 13 | 0 | 2 | 2 | 0 | 15 | 15 |
| 4.h. | Nursery, grafting etc. |  |  |  |  |  |  |  |  |  |  |
| 4.i. | Tailoring, stitching, embroidery, dying etc. |  |  |  |  |  |  |  |  |  |  |
| 4.j. | Agril. para-workers, para-vet training |  |  |  |  |  |  |  |  |  |  |
| 4.k. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
| **5** | **Agricultural Extension** |  |  |  |  |  |  |  |  |  |  |
| 5.a. | Capacity building and group dynamics |  |  |  |  |  |  |  |  |  |  |
| 5.b. | Others (pl.specify) |  |  |  |  |  |  |  |  |  |  |
|  | **Grand Total** | **3** | **100** | **117** | **217** | **14** | **10** | **24** | **114** | **127** | **241** |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.**  **No.** | **Name of Job Role** | **Date**  **of Start** | **Date of Close** | **Total**  **Participants** | **No. of Participants** | | | | | | | | | **Date**  **of**  **Assessment** | **No of Participants passed**  **assessment** |
| **General** | | | **SC/ST** | | | **Grand Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **1** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**PART VIII – EXTENSION ACTIVITIES**

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

| **Nature of Extension Programme** | **No. of Programmes** | **No. of Participants (General)** | | | **No. of Participants**  **SC / ST** | | | **No.of extension personnel** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Advisory services | 1267 | 1050 | 150 | 1200 | 47 | 20 | 67 | 1097 | 170 | 1267 |
| Farmers visit to KVKs | 350 | 310 | 20 | 330 | 15 | 5 | 20 | 325 | 25 | 350 |
| Lectures delivered as resource persons | 82 | 9000 | 900 | 9900 | 146 | 57 | 203 | 9146 | 957 | 10103 |
| Diagnostic Visits | 55 | 230 | 10 | 240 | 10 | 2 | 12 | 240 | 12 | 252 |
| Field Days | 11 | 270 | 49 | 319 | 30 | 10 | 40 | 300 | 59 | 359 |
| Group discussions/ meetings | 13 | 180 | 80 | 260 | 20 | 7 | 27 | 200 | 87 | 287 |
| Kisan Gosthies |  |  |  |  |  |  |  |  |  |  |
| Film Shows | 25 | 750 | 107 | 857 | 25 | 15 | 40 | 775 | 122 | 897 |
| Self help group meetings | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Mahila mandals meetings | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Kisan Melas | 3 | 500 | 225 | 725 | 75 | 60 | 135 | 575 | 285 | 860 |
| Exhibitions | 3 | 525 | 375 | 900 | 125 | 40 | 165 | 650 | 415 | 1065 |
| Scientist visit to farmers fields | 200 | 900 | 31 | 931 | 100 | 10 | 110 | 1000 | 41 | 1041 |
| Soil health camps | 2 | 45 | 8 | 53 | 5 | 2 | 7 | 50 | 10 | 60 |
| Animal health camps | 4 | 323 | 61 | 384 | 38 | 19 | 57 | 361 | 80 | 441 |
| Plant health camps | 3 | 121 | 25 | 146 | 10 | 9 | 19 | 131 | 34 | 165 |
| Farm Science Club meetings | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Ex-trainees Sammelans | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Farmers seminars | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Workshops | 6 | 172 | 65 | 237 | 38 | 10 | 48 | 210 | 75 | 285 |
| Method Demonstrations | 25 | 550 | 95 | 645 | 65 | 25 | 90 | 615 | 120 | 735 |
| Celebration of important days | 7 | 823 | 121 | 944 | 52 | 30 | 82 | 875 | 151 | 1026 |
| Special day celebrations  Swachatha hi seva | 9 | 320 | 35 | 355 | 32 | 23 | 55 | 352 | 58 | 410 |
| Parthenium Awareness week | 4 | 92 | 23 | 115 | 22 | 8 | 30 | 114 | 31 | 145 |
| Exposure visits | 6 | 110 | 50 | 160 | 17 | 10 | 27 | 127 | 60 | 187 |
| Others, Please specify  Folders | - | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Total** | **2075** | **16271** | **2430** | **18701** | **872** | **362** | **1234** | **17143** | **2792** | **19935** |

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

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Type of media/activity** | **Number of activities/Number** |
| 1 | Popular articles | 6 |
| 2 | Newspaper coverage | 82 |
| 3 | Extension Literature (Folders) | 5 |
| 4 | Radio Talks | 9 |
| 5 | TV Talks | 5 |
| 6 | CD/DVD/Video clips | - |
| 7 | Animal health camps (no. of animal treated) | 4(2720) |
| 8 | Others, please specify | - |
|  | **Total** | **114** |

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Crop category | **Name of the crop** | **Name of the**  **Variety** | **Quantity of seed**  **(q)** | **Value**  **(Rs)** | **Number of farmers to whom provided** |
| Cereals (crop wise) |  |  |  |  |  |
| Oilseeds |  |  |  |  |  |
| Pulses |  |  |  |  |  |
| Commercial crops |  |  |  |  |  |
| Vegetables |  |  |  |  |  |
| Flower crops |  |  |  |  |  |
| Spices |  |  |  |  |  |
| Fodder crop seeds | Multicut fodder sorghum | COFS-31 | 0.315 | 14175 | 6 |
| Sunhemp | Local | 1.20 | 9600 | 21 |
| Fiber crops |  |  |  |  |  |
| Forest Species |  |  |  |  |  |
| Other (Specify) |  |  |  |  |  |
| **Total** | **-** | **-** | **1.515** | **23775** | **27** |

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Crop category** | **Name of the crop** | **Variety** | **Number** | **Value (Rs.)** | **Number of farmers to whom provided** |
| Commercial | Mulberry | V-1 | 3630 | 14520 | 6 |
| Mango | root stock | 140 | 1400 | 1 |
| Vegetable seedlings | Drumstick | Bhagya | 27332 | 277620 | 127 |
| Fruits |  |  |  |  |  |
| Ornamental plants |  |  |  |  |  |
| Medicinal and Aromatic |  |  |  |  |  |
| Plantation |  |  |  |  |  |
| Spices | Curry leaf | Local/Suhasini | 1855 | 25794 | 23 |
| Tuber |  |  |  |  |  |
| Fodder crop saplings |  |  |  |  |  |
| Forest Species |  |  |  |  |  |
| Others(specify) | Fodder sold | COFS-31 | 4000 kg | 4000 | 2 |
| **Total** |  |  | **32957** | **319334** | **157** |
|  |  | **4000 kg** | **4000** | **2** |

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

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bio Products** | **Name of the bio-product** | **Quantity**  **(q)** | **Value (Rs.)** | **Number of farmers to**  **whom provided** |
| Bio Fertilizers |  |  |  |  |
| Bio-pesticide |  |  |  |  |
| Bio-fungicide |  |  |  |  |
| Bio Agents | Waste decomposer | 1054 Nos | 4862 | 114 |
| Siddi zola(super powder) | 10 kg | 1500 | 1 |
| Others (specify) |  |  |  |  |
| **Total** |  |  |  |  |

# 9.D. Production of livestock

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

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

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

(i) KVK Newsletter:**4 issues**

Date of start: **01.01.2021** Periodicity: **(January- March 2021, April- June 2021, July-September 202, October-December 2021)** Copies printed in each issue: **e- News letter (Sent through e-mails)**

(ii) Summary of Literature developed/published

|  |  |
| --- | --- |
| **Item** | **Number** |
| Research papers- International | - |
| Research papers- National | - |
| Technical reports | - |
| Technical bulletins | 3 |
| Popular articles - English | - |
| Popular articles – Local language | 6 |
| Extension literature | - |
| Others if any (Folder) | 5 |
| Training Manual | 1 |

(iii) Details of Literature developed/published

**Popular articles**

1. Shashidhar. K.R., Umesh Naik, Chikkanna G.S, Thulasiram K,(2021) Production and utilization of liquid fertilizers in organic mulberry cultivation, Reshme Krushi, January-February-2021: 03-06.
2. Shahsidhar K.R & Thulasiram. K, (2021) Management of viral diseases of silkworm through integrated approach, Reshme krushi, March-April-2021: 11-12.
3. Shahsidhar K.R & Thulasiram. K, (2021) Management of root knot nematode in mulberry thrips integrated approach. Reshem krushi, May-August-2021: 24-25.
4. Shahsidhar K.R, Anil kumar S, Umesha Naik, Thulasiram K.(2021) Precautionary measures taken during application of tank silt in mulberry cultivation, Reshme krushi, May-August-2021: 26-27.
5. Shahsidhar K.R, K. Thulsiram. K, Anil Kumar S and Ambika D.S (2021) Importance of phosphorus solubulizer in mulberry Reshme Krushi, September-October-2021: 11-12.
6. Shashidhar K.R, Noorulla Haveri and Chikkanna G.S,(2021) Value added products from mulberry leaf and fruits, Udyana loka: 11(1) PP:36- 38, April-June-2021

**Folders**

1. Shashidhar K.R, Thulasiram K, Anil kumar. S, Ambika D.S, Jyothi Kattegoudar, Chikkanna G. S., Umesha Naik, Swathi G.R,

(2021), Recycling of serifarm residue into quality compost production.

2. Swathi G.R, K. Thualsiram. K, Anil Kumar S., Jyothi Kattegoudar, Ambika D.S, Shashidhar K.R, Chikkanna G.S, Umesha Naik (2021), Weather forecast & weather based Agromet advisory services at finger tips of farmers.

3. Thulasiram. K., Anil Kumar. S, Chikkanna, Umesh Naik, Swathi G.R, Tips to save energy in domestic & agriculture sector

(2021).

4. Thulasiram .K, Ambika D.S, Jyothi Kattegoudar, Shashidhar .K.R .(2021) Integrated pest management of pest and diseases in

important vegetable crops.

5. Chikkanna G.S, Niranjan murthy, Anand. S.R, V.D. Rupadevi, K.Thulasiram. (2021) Improved cultivation and value addition

of chia.

**Technical Bulletins**

1. Shashidhar. K.R, Thulasiram K, Anil kumar. S, Chikkanna G.S, Umesha Naik (2021), Organic based nutrient management in mulberry for sustainable leaf production.
2. Shashidhar K.R, Thulasiram. K, Ambika D.S, Jyothi Kattegoudar, Swathi G.R (2021), Integrated management of major pests of mulberry.
3. Ambika D.S, Thulasiram K.Shashidhar. K.R, (2021) Integrated pest management in cabbage.

**Training Manual**

1. Chikkanna G.S, Jyothi Kattegoudar (2021): One month training manual(January 2021) , Sri Vishwabharathi publishers, Pages 104

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

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | **Type of media** | **Title** | **Details** |
| 1 | CD / DVD |  |  |
| 2 | Mobile Apps |  |  |
| 3 | Social media groups with KVK as Admin | Whats app group | Raitha mahithi bhandara, Raitha mithraru kasaba malur, farmers solution, Raitha vishwada pranadata, RSK Vokkaleri |
| 4 | Facebook account name | ICAR-Krishi Vigyan Kendra Kolar | |
| 5 | Instagram account name |  |  |
| 6 | Others if any |  |  |

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

|  |  |
| --- | --- |
| **Title** | **Soil fertility enrichment in mango** |
| **Background** | Kolar district is known for largest area under mango with 49.42 thousand hectares and a production of 4.22 lakh tonnes. This fruit crop suffers from low average productivity because of various reasons like, senility of mango trees, poorly managed orchards, rainfed conditions, poor nutrient management *etc.* |
| **Technology** | In order to maintain soil productivity and ensuring the sustainable mango production Integrated Nutrient Management (INM)plays a greater role.As one of the INM component,green manuring has been introduced with sunhemp. It is grown in the mango orchards between the plants, after sufficient growth, at 100 per cent flowering stage the crop is incorporated into the soil. |
| **Intervention** | KVK Kolar has taken up conducting front line demonstrations, training programmes, method demonstrations and campaigns to popularise intercropping mango orchards with sunhemp since 2015 in different villages. Sunhemp (*Crotalaria juncia* L.) seeds were distributed to encourage farmers to grow as intercrop. This crop is of 60 days, produces almost 30 tonnes of dry matter per hectare. On dry weight basis sunhemp contains 2.30 per cet of nitrogen, 0.50 per cent of phosphorous and 1.80 per cent of potash. |
| **Impact** | As a result of concentrated efforts, growing green manuring crop sunhemp every year increases the soil fertility status, in turn the productivity of mango orchards. Each kg of sunhemp seeds cost Rs. 80 so the total cost will be Rs. 1600 per hectare. Sunhemp also increases the beneficial microbial load in the soil. |
| **Horizontal spread** | Around 10 percent of mango growing area has adopted this technology i.e. 5000 hectare in the district. The productivity of orchard has increased by 10-12 per cent *i.e.* 9.00 t ha-1. |
| **Economic gains** | Before adoption of this technology the average yield was 8.05 t ha-1. The total net returns gained per hectare is Rs. 7,900 Rs. Due to introduction of this technology, the total economic benefits accrued since 2015 is estimated at Rs.27.65 crores during the period 2015 to 2021. |
| **Photos** | 20201001_121435(pm)___[org] f210467a-deaa-4ae2-800d-055eca9e68c9 |

|  |  |
| --- | --- |
| **Title** | **Canopy management in mango** |
| **Background** | Kolar district is known for largest area under mango with 49.42 thousand hectares and a production of 4.22 lakh tonnes. Canopy management is one of the most important factors to sustain the yield and quality of fruits in mango. The main factor is the extent of incoming radiation and percentage radiation intercepted by tree canopies. It can be enhanced by proper canopy management practices. The unwanted portions may develop at the expense of those which are essential. Appropriate pruning practices keep the plant in such shape and condition as to yield fruits of desired quality. Canopy management depends on varietal characters, flowering habit of the crop and number of plants per hectare. |
| **Technology** | Canopy management can be adopted at two stages of plant growth. During initial years of planting, training has to be done to establish strong plant architecture. Here single stem will be maintained for about three feet from the soil surface, so that the other cultural practices like ploughing can be done near to tree trunk and it will be easy to identify mango stem borer affected plants and managing them. In the subsequent years, only the criss-cross grown, disease affected and damaged branches are removed. The main point to be considered while pruning, is the removal of only 30-40 percent of vegetative growth inside the canopy and less than 20 per cent at the terminal positions of branches, because mango flowers on one year old shoot. Immediately after harvesting, field sanitization should be done. Sanitization has to be followed by pruning in the month of July-August, which can significantly improve the plant health and quality of yield. This will increase an approximately 10-15 per cent of yield. |
| **Intervention** | KVK Kolar has taken up conducting front line demonstrations, training programmes, method demonstrations and campaigns to popularise the pruning practises in mango since 2015 in different villages of the district. Pruning saw was also distributed in the demonstrated plot to different farmers. |
| **Impact** | Pruning techniques increased the penetration of sunlight in to the canopy, hence, the accumulation of photosynthets in terms of economic yield. As a result of concentrated efforts, the average yield is increased by 10-15 per cent i.e. 8.05 t ha-1. Before adoption of this technology the average yield was 7.00 t ha-1. |
| **Horizontal spread** | Almost 30 per cent of the mango growing area i.e. 15,000 ha has adopted this technology within the district. |
| **Economic gains** | The cost of cultivation has increased by 5,000 Rs per hectare because of pruning. The total net returns gained per hectare 5,500 Rs. Due to introduction of this technology, the total economic benefits accrued since 2015 is estimated at Rs.57.75 crores during the period 2017 to 2021 in the district. |
| **Photos** | DSC_0017 DSC_0101 |

|  |  |
| --- | --- |
| **Title** | **Use of growth regulators in potato** |
| **Background** | Potato is one of the important vegetable crop grown in the Kolar district during rabi season. It occupies an area of 3.56 thousand hectares with an annual production of 57.75 thousand tonnes. The rabi season is most suitable, will be providing most congenial environment in-terms of night temperature and optimum soil moisture for potato tuber production. Since the congenial environment leads to better vegetative production, in order to arrest the vegetative growth and enhance the tuber production in potato, a growth retardant “mepiquat chloride” is sprayed. |
| **Technology** | Mepiquat chloride is sprayed at a concentration of 0.5 ml per liter of water at 45 days after sowing of tubers. Use of this growth retardant will enhance the number of tubers per plant and average tuber weight, which leads to overall increase in the productivity of potato crop apart from decreasing the incidence of pest and diseases. Thus, the use of growth retardant will not only increase the productivity, it will also help to decrease the incidence of disease. |
| **Intervention** | Since potato is one of the major vegetable crop of the Kolar district, KVK Kolar has taken up conducting front line demonstrations, training programmes and campaigns to popularise the use of growth retardant in potato in different villages. |
| **Impact** | Spraying of 0.5 ml mepiquat chloride per litre of water at 45 days after sowing will decrease the vegetative growth of the crop. This arrest of vegetative growth, will lead to increase in the tuber number per plant and average tuber weight, inturn the productivity of the crop. The total cost involved in adoption of this technology per hectare is Rs. 700-800. Upon adoption of this technology the productivity of the crop has been increased to 22.10 t ha-1 from 20.16 t ha-1. The average number of tubers per plant has been increased from 7.75 to 8.69 after adoption of this technology. |
| **Horizontal spread** | As a result of concentrated efforts, foliar application of growth retardant at 45 days after sowing has proved to be an efficient technology to increase the yield. This particular technology has spread to almost 300 ha of potato growing area. It increases the cost of cultivation to Rs. 1000 per hectare. |
| **Economic gains** | Upon adoption of this technology the productivity of the crop has been increased to 22.10 t ha-1 from 20.16 t ha-1. The average number of tuber per plant has been increased from 7.75 to 8.69 after adoption of this technology. The total net returns gained per hectare is Rs. 18,400 Due to introduction of this technology, the total economic benefits accrued since 2017 is estimated at Rs. 2.76 crore during the period 2017 to 2021. |
| **Photos** | dc62d2af-b799-454c-bb1d-8d821bdd00c0 G:\KVK 2016-17 DTD 10.04.2017\ALL PHOTOS 2016-17\Field Day\Field day -Potato-gennerahalli-23.3.17\DSC_0009.JPG |

|  |  |
| --- | --- |
| **Title** | **Use of Traps for the management of insect pest in Tomato** |
| **Background** | In Karnataka, Kolar district is having highest area (16328 Ha) and production (930418 Tonnes) of tomato crop. The tomato loses market value about 20% due to multiple problems like late blight infection and among pest infection of thrips, Tuta absoluta and aphids, Application of different agro pesticides/insecticides to manage these pests leads to environmental pollution and also increasing cost of cultivation. |
| **Technology** | To reduce the pest infestation in tomato, mechanical management plays important role in integrated pest management as an use of different traps viz., yellow sticky trap, blue sticky trap and lure pheromone trap. Technology assessment and demonstration and further popularized through FLD’s and other extension activities. |
| **Intervention** | KVK-Kolar has taken front line demonstrations in three different villages of three taluks namely Yadahalli, Kolar tq (2019-20, 2020-21), Thimmasandra, KGF tq(2020-21), Kadudevandahalli, Srinivasapura tq in the year 2021-22 and various training programmes, method demonstration and other extension activities over a period of 4-5 years. |
| **Impact** | Installation of yellow sticky trap (20/acre), blue sticky trap (20/acre) and *Tuta* specific pheromone traps (20 /acre) are an alternative technology for management of insect pests. The cost of traps is 5000/ha compared to regular application of pesticides at Rs. 20000/ha. The total net return gained per ha 65000 due to introduction of traps for the management of insect pests in tomato. |
| **Horizontal spread** | This technology has spread nearly 1900 ha in the district resulting in an economic benefit of 12.3 crore annually. |
| **Economic gains** | After adoption of this technology it saves the cost of chemicals to the tune of Rs. 4890. The total net return gained per ha Rs. 65000 due to introduction of traps for the management of insect pests in tomato. |
| **Photos** | D:\Middle Computer- Savitri-files\4. KVK 2019-20\ALL PHOTOS\FLD 2019-20\Yadahalli 2019-20\Yadahalli 22.10.2019\DSC_0005.JPGD:\06.01.2021\DSC_0215.JPG |
|  | E:\Dr. Ambika kvk\FLD OFT photo @2019-20\Yadahalli 2019-20\Yadahalli tomato FLD-31.10.19\DSC_0009.JPGD:\All photos-2021-22\FLD\Plant protection\tomato-29.9.2021\DSC_0021.JPG |
|  | D:\All photos-2021-22\FLD\Plant protection\Tomato FLD-3.8.2021\Selected photos\WhatsApp Image 2021-08-03 at 5.09.30 PM (1).jpegD:\Last -sudha-system-hp-v192\All Photos2020-21\Method Demonstration\tomato FLD-yadahalli-26.8.2020\DSC_0007.JPG |

|  |  |
| --- | --- |
| **Title** | **Waste decomposer microbial consortia - a promising compost culture for recycling of sericulture farm residue to enhance the farmers income** |
| **Background** | Karnataka is the premier state which contributes around 50% of the total silk production in India. Kolar district is famous for silk production in the state. It has become a good source for economic upliftment of rural people in view of its fast income generating nature. It has been estimated that from one hectare of mulberry farm, about 20-25 MT of sericulture waste is generated yearly in the form of silkworm rearing waste and other farm wastes which is equivalent to 280-300 Kg of nitrogen, 90-100 Kg of phosphorus and 150-200 Kg of potash. Further, the mulberry shoots normally take 9-12 months for decomposition. Proper usages of these raw materials as organic manure in short period can substantially bring down the expenditure on chemical fertilizers. |
| **Technology** | Scientific composting technology brings down the cost of cultivation as well as to improve the soil health and crop yield. The National Centre of Organic Farming, Ghaziabad developed a product called Waste Decomposer microbial consortia. It is a consortium of few beneficial microorganismsis excellent source for lignocelluloses degradation with more robust growth and faster secretion of lignocelluloses-decomposing enzymes with better pH tolerance.The mass multiplied solution of waste decomposer is used to decompose sericulture farm residue/bio-waste into organic manure in short period. |
| **Intervention** | The present On farm testing has been taken up in the three farmers field to know the suitable microbial consortia for composting of sericulture farm residue assessed by KrishiVigyan Kendra Kolar at Chitnahalli and Kadudevandahalli villages during 2019-20, 2020-21. Further, conducted several training programmes to address the crop residue management, production of good quality compost in short period, income related issues in a view to spread the technology. |
| **Impact** | Before intervention of the technology most of the sericulture farmers in the villages were dumping the sericulture farm residue in road side or compost pit, due to slow decomposition process sometimes burnt the material also. After intervention of composting of sericulture farm residue with different compost culture, farmers are getting compost yield 889.60 kg/ton and obtaining compost yield upto 22.32 t/ha/year through waste decomposer microbial culture solution. Further it takes 77 days for decomposition of seri residue compare to other compost cultures. Similarly, in farmer practice the decomposition of crop residue takes upto 281 days and compost yield recorded 3.62 t/ha/year, respectively. Around 18.72 tons of compost produced in one hectare of mulberry per year over farmer practice. |
| **Horizontal Spread** | In the year 2019-20 & 2020-21 the technology was tried through OFT by KVK, Kolar covering 3 ha area and there was upsurge in area of up to 200 ha covering 500 farmers in the year 2020-21 throughout the district by adopting the technology which is popularized through training programmes and field day organized by KVK, Kolar in collaboration with department of sericulture Kolar. |
| **Economic gains** | The benefit cost ratio was recorded as 14.37 compare to farmer practice 3.63. Further, net return obtained from compost produced through waste decomposer microbial consortia obtained Rs. 42140 per hacter per year compare to farmer practice Rs. 5260. These features make this technology unique and highly efficient to convert all types of waste into good compost within a shorter period of 80-90 days |
| **Photos** | G:\20210316_090253.jpgG:\20210316_085115.jpg |
|  |
|  |
|  |  |

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

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

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

10 F. Technology Week celebration:

Period of observing Technology Week: From to

Total number of farmers visited :

Total number of agencies involved :

Number of demonstrations visited by the farmers within KVK campus :

Other Details

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

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

**PART XI – SOIL AND WATER TEST**

**11.1 Soil and Water Testing Laboratory**

A. Status of establishment of Lab :

1. Year of establishment : 2021

2. List of equipments purchased with amount :

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

B. Details of samples analyzed since establishment of SWTL:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
| Soil Samples | 3413 | 3413 | 3413 | 6,82,600 |
| Water Samples | 2313 | 2313 | 2313 | 4,62,600 |
| Plant samples |  |  |  |  |
| Manure samples |  |  |  |  |
| Others (specify) |  |  |  |  |
| Total | 5726 | 5726 | 5726 | 1145200 |

C. Details of samples analyzed during 2021:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
| Soil Samples | 280 | 280 | 220 | 56,000 |
| Water Samples | 233 | 233 | 200 | 46,600 |
| Plant samples |  |  |  |  |
| Manure samples |  |  |  |  |
| Others (specify) |  |  |  |  |
| Total | 513 | 513 | 420 | 123600 |

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

|  |  |  |
| --- | --- | --- |
| Mobile Kits | Date of purchase | Current status |
| 1. | 25.3.2017 | Under repair |

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | During 2020 | During 2021 | Cumulative progress (Total) |
| Samples analyzed (No.) | 10 | 35 | 45 |
| Farmers benefited (No.) | 10 | 40 | 50 |
| Villages covered (No.) | 10 | 30 | 40 |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | Date (s) | Villages (No.) | Farmers (No.) | Samples analyzed (No.) | Soil health cards issued (No.) |
| SWTL | 2021 | 500 | 513 | 513 | 513 |
| Mobile Soil Testing Kit | 2021 | 105 | 105 | 105 | 105 |

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 | 360 | 60 soil health cards(NBSS & LUP) | - | Dr. Selvamani, Deputy Commissioner, Kolar  Scientists from NBSS & LUP | 10 | News paper  4 |

**PART XII. IMPACT**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of specific technology/skill transferred** | **No. of participants** | **% of adoption** | **Change in income (Rs.)** | |
| **Before (Rs./Unit)** | **After (Rs./Unit)** |
|  |  |  |  |  |
|  |  |  |  |  |

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

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

**SOIL FERTILITY ENRICHMENT IN MANGO**

**Profile of Technology**

Kolar district is known for largest area under mango with 49.42 thousand hectares and a production of 4.22 lakh tonnes. This fruit crop suffers from low average productivity because of various reasons like, senility of mango trees, poorly managed orchards, rainfed conditions, poor nutrient management etc. In order to maintain soil productivity and ensuring the sustainable mango production Integrated Nutrient Management (INM) plays a greater role. As one of the INM component, green manuring has been introduced with sunhemp. It is grown in the mango orchards between the plants, after sufficient growth, at 100 per cent flowering stage the crop is incorporated into the soil. Sunhemp (Crotalaria juncia L.) is of 60 days crop, produces almost 30 tonnes of dry matter per hectare. On dry weight basis sunhemp contains 2.30 per cet of nitrogen, 0.50 per cent of phosphorous and 1.80 per cent of potash.

**Challenges**

Mango orchards are not supplied with sufficient quantity of nutrients every year and are one of the main reasons for low productivity of mango orchards. Many of the mango growers leave the orchard unattended. Few of them grow commercial crops like tomato, mulberry, marigold *etc.* as intercrops in young orchards. In majority of cases the, nutrient replacement will not be done, leading to unproductive orchards.

**Target Beneficiaries and Key Benefits**

All mango growers can adopt this technology. After harvest of mango fruits, filed sanitization, ploughing is done. After receipt of showers in the month of July, 20 kg of sunhemp seeds are broadcasted per hectare between the bearing mango plants. Sunhemp starts flowering from 45 days after sowing. At 50-55 days after sowing the crop will be at 100 per cent flowering stage. At this stage, ploughing can be done with the help of rotovator and cutter in order to incorporate the sunhemp crop into the soil to enrich the soil fertility. Sunhemp improves the soil structure, water holding capacity and decreases the soil erosion. In turn it leads to increase in the productivity of mango orchards by 10-12 per cent.

**Economic Benefits**

Since Kolar district has largest area under mango, the KVK Kolar has taken up conducting front line demonstrations, training programmes, method demonstrations and campaigns to popularise intercropping mango orchards with sunhemp since 2015 in different villages. As a result of concentrated efforts, growing green manuring crop sunhemp every year increases the soil fertility status, in turn the productivity of mango orchards. Each kg of sunhemp seeds cost Rs. 80 so the total cost will be Rs. 1600 per hectare. Sunhemp also increases the beneficial microbial load in the soil. Around 10 percent of mango growing area has adopted this technology i.e. 5000 hectare in the district. The productivity of orchard has increased by 10-12 per cent i.e. 9.00 t ha-1. Before adoption of this technology the average yield was 8.05 t ha-1. The total net returns gained per hectare is Rs. 7,900 Rs. Due to introduction of this technology, the total economic benefits accrued since 2015 is estimated at Rs.27.65 crores during the period 2015 to 2021.

|  |  |
| --- | --- |
| 20201001_121435(pm)___[org] | f210467a-deaa-4ae2-800d-055eca9e68c9 |
| **Sunhemp is grown as green manuring crop in mango orchards** | **Incorporation of sunhemp - a green manuring crop in the soil in mango orchards.** |

**USE OF GROWTH REGULATORS IN POTATO TO ENHANCE YIELDS**

**Profile of Technology**

Potato is one of the important vegetable crop grown in the Kolar districtduring *rabi* season. It occupies an area of 3.56 thousand hectares with an annual production of 57.75 thousand tonnes. The *rabi* season is most suitable, will be providing most congenial environment interms of night temperature and optimum soil moisture for potato tuber production. Since the congenial environment leads to better vegetative production, in order to arrest the vegetative growth and enhance the tuber production in potato, a growth retardant “mepiquat chloride” is sprayed at a concentration of 0.5 ml per liter of water at 45 days after sowing of tubers. Use of this growth retardant will enhance the number of tubers per plant and average tuber weight, which leads to overall increase in the productivity of potato crop.

**Challenges**

Potato is one of major commercial vegetable grown in the *rabi* season in irrigated condition. The suitable weather and moisture condition leads to luxurious vegetative growth of the crop at the expense of tuber production. This will reduce the productivity of the crop and increases the incidence of pest and diseases. Thus, the use of growth retardant will not only increase the productivity, it will also help to decrease the incidence of disease.

**Target Beneficiaries and Key Benefits**

All potato growers can adopt this technology. Spraying of 0.5 ml mepiquat chloride per litre of water at 45 days after sowing will decrease the vegetative growth of the crop. This arrest of vegetative growth, will lead to increase in the tuber number per plant and average tuber weight, inturn the productivity of the crop. The total cost involved in adoption of this technology per hectare is Rs. 700-800. Upon adoption of this technology the productivity of the crop has been increased to 22.10 t ha-1 from 20.16 t ha-1. The average number of tubers per plant has been increased from 7.75 to 8.69 after adoption of this technology.

**Economic Benefits**

Since potato is one of the major vegetable crop of the Kolar district, KVK Kolar has taken up conducting front line demonstrations, training programmes and campaigns to popularise the use of growth retardant in potato in different villages. As a result of concentrated efforts, foliar application of growth retardant at 45 days after sowing has proved to be an efficient technology to increase the yield. Upon adoption of this technology the productivity of the crop has been increased to 22.10 t ha-1 from 20.16 t ha-1. The average number of tuber per plant has been increased from 7.75 to 8.69 after adoption of this technology. This particular technology has spread to almost 300 ha of potato growing area. It increases the cost of cultivation to Rs. 1000 per hectare. The total net returns gained per hectare is Rs. 18,400 Due to introduction of this technology, the total economic benefits accrued since 2017 is estimated at Rs. 2.76 crore during the period 2017 to 2021.

|  |  |
| --- | --- |
| dc62d2af-b799-454c-bb1d-8d821bdd00c0 | G:\KVK 2016-17 DTD 10.04.2017\ALL PHOTOS 2016-17\Field Day\Field day -Potato-gennerahalli-23.3.17\DSC_0009.JPG |
| **A profusely grown potato and farmer showing healthy and large sized tubers** | **Filed day conducted after adopting the technology** |

**WASTE DECOMPOSER MICROBIAL CONSORTIA - A PROMISING COMPOST CULTURE FOR RECYCLING OF SERICULTURE FARM RESIDUE TO ENHANCE THE FARMERS INCOME**

**Profile of Technology**

A waste Decomposer microbial consortium is a product developed by National Centre of Organic Farming, Ghaziabad. It is a consortium of several beneficial microorganisms and is an excellent source for lignocelluloses degradation with more robust growth and faster secretion of lignocelluloses-decomposing enzymes with better pH tolerance. The mass multiplied solution of waste decomposer is used to decompose sericulture farm residue/bio-waste into organic manure in a short period. This has become one of the most popular technology in Kolar district, which was identified by KVK, Kolar through Technology assessment and demonstration and further popularised through FLDs and other extension activities.

**Challenges**

It has been estimated that from one hectare of mulberry farm, about 20-25 MT of sericulture waste is generated yearly in the form of silkworm rearing waste and other farm wastes which is equivalent to 280-300 Kg of nitrogen, 90-100 Kg of phosphorus and 150-200 Kg of potash. Further, the mulberry shoots normally take 9-12 months for decomposition. Sometimes sericulture farmers burnt the valuable residue due to lack of knowledge on proper usages of these raw materials as organic manure in short period. Farmers can also substantially bring down the expenditure on chemical fertilizers over the period.

**Target Beneficiaries and Key Benefits**

All sericulture farmers can adopt this technology. Take 2 kg jaggery and mix it in a plastic drum containing 200 litres water. Take 1 bottle of waste decomposer and transfer all its contents into plastic drum containing jaggery solution with the help of a clean stick. Mix it properly with a wooden stick for uniform distribution of waste decomposer in the drum. Cover the drum with a thin cloth and stir it every day once or twice. After 7 days the solution of drum turns creamy and ready for use. Fill 18-20 cm thick layers of 1 ton of seri farm residue are piled in the compost pit. Wet the waste with solution of waste decomposer. Again another 18-20 cm thick layer of bio-waste is spread & again wet with waste decomposer solution. The above process is repeated till the piling goes upto 3ft. Turn the pile at every 15 days interval for uniform composting and add more solution at every turning. Maintain 60% moisture during the entire period of composting. If required again add solution. The compost gets ready to use after 80-90 days. After Technology assessment and demonstration of the technology has shown that, farmers are getting compost yield 889.60 kg/ton and obtaining compost yield upto 22.32 t/ha/year through waste decomposer microbial culture solution. Further it takes 77 days for decomposition of seri residue compare to other compost cultures. Similarly, in farmer practice the decomposition of crop residue takes upto 281 days and compost yield recorded 3.62 t/ha/year, respectively. Around 18.72 tons of compost produced in one hectare of mulberry per year over farmer practice. Further, completion of each batch of silkworm rearing farmer using these residues for compost production throughout the year using waste decomposer consortia. Application of produced compost to crops can significantly improve the plant health and soil health status and decrease in purchase FYM and usage of chemical fertilizer. In long term effect this can improve the beneficial microbes level in the soil.

**Economic Benefits**

Before intervention of the technology most of the sericulture farmers in the villages were dumping the sericulture farm residue in road side or compost pit, due to slow decomposition process sometimes burnt the material also. After adoption of this technology it saves the cost of purchasing of FYM Rs. 36880 per ha. The benefit cost ratio was recorded as 14.37 compare to farmer practice 3.63. Further, net return obtained from compost produced through waste decomposer microbial consortia obtained Rs. 42140 per hacter per year compare to farmer practice Rs. 5260. These features make this technology unique and highly efficient to convert all types of waste into good compost within a shorter period of 80-90 days. The total economic benefit accrued since it is initiated in 2018 is estimated at Rs.1.84 crore during the period 2018 to 2021. To accelerate the adoption, KVK, Kolar has purchasing waste decomposer bottles from production units and selling to farmers in the KVK premises, So the waste decomposer consortia technology has spread to 500 ha in Kolar area with 690 farmers. This is popularized through training programmes, Swacchata awareness programme and field days organized by KVK, Kolar in collaboration with department of sericulture Kolar.

|  |  |
| --- | --- |
| **20210316_085004** |  |
| **Production of compost from seri farm residue** | **Recycling of sericulture farm residue into quality compost using waste decomposer consortia** |

**FC2 X FC1 - A PRODUCTIVE BIVOLTINE DOUBLE HYBRID FOR QUALITY COCOON PRODUCTION AND CROP STABILITY**

**Profile of Technology**

Karnataka is the leading sericulture state which contributes around 48% of the total silk production in India. The climatic conditions of Karnataka favour sericulture throughout the year. Considering the importance of the introduction of an exclusive bivoltine hybrid to bring quantitative and qualitative improvement in silk production, the FC2 X FC1 hybrid is more productive and robust, which can be easily reared by the farmers by adopting appropriate rearing technology developed by the CSRTI, Mysore. This hybrid has more genetic plasticity to buffer against adverse climatic conditions and thereby resulting in crop stability than single/cross hybrids. This has become one of the most popular technology in Kolar district, which was identified by KVK, Kolar popularised through FLDs and other extension activities.

**Challenges**

In tropical condition high temperature, low humidity, poor rearing management, poor quality leaf, high incidence of diseases are mainly responsible for partial success of silkworm crops at the farmers level. In recent years new silkworm hybrids respond well to increased use of inputs to reach the potential yield levels. Cross breeds are hardy and have tremendous ability to survive under varied or fluctuating environmental climatic conditions. But its quality is at low when compared to the existing international standard and also low cocoon price in the market compare to bivoltine hybrid. About 80% of the farmers in the district are rearing cross breed silkworm hybrid like PM X CSR2.

**Target Beneficiaries and Key Benefits**

All sericulture farmers of the tropical regions of the country can rear this bivoltine hybrid. During demonstration 3 step disinfection method was carried out for disinfection of silkworm rearing house, provided 2nd moult FC2 x FC1 healthy chawki worms, focused on cultivation of nutritive mulberry foliage for late age silkworms and rearing with optimal environmental condition, using recommended bed disinfectants, mountages & mounting care and also conducted several training programmes to address yield, quality and income related and cost saving issues in a view to spread the technology After demonstration of the technology has shown that, farmers are getting 86.76 kg/100 dfls, single cocoon weight ranged from 2.00 – 2.40 gm, shell weight ranged from 0.450 – 0.550g, cocoon shell ratio ranged from 22-24 %, raw silk percentage ranged from 18-19 % compare to PM x CSR2 cross breed (79.64 kg/100 dfls, single cocoon weight ranges from 1.80 – 1.90 gm, shell weight ranges from 0.320 – 0.350g, cocoon shell ratio ranges from 18-19 %, raw silk percentage ranges from 14-15 % respectively).

**Economic Benefits**

Before intervention of the technology most of the sericulture farmers in the district rearing PM x CSR2 cross breed and getting an average cocoon yield of 79.64 kg/100 dfls. After adoption of bivoltine hybrid it saves the cost Rs. 6862/100dfls. After intervention of new bivoltine hybrid FC2 x FC1, farmers are getting net returns Rs. 23,925/100 dfls increased by 40.38 per cent over the farmers practice (Rs. 17,063/100 dfls). The total economic benefit accrued since it is initiated in 2017 is estimated at Rs.6.17 crore during the period 2017 to 2021. So rearing of bivoltine hybrid FC2 x FC1 has increased to 9,00,000 dfls in Kolar area with 1200 farmers. This is popularized through training programmes and field day organized by KVK, Kolar in collaboration with department of sericulture Kolar.

|  |  |
| --- | --- |
| G:\KRS\Extn.Activities Folders\Photos FLD-OFT 2014-19\2017-18\OFT\OFT Parshwaganahalli\DSC_0012.JPG | C:\Users\KVKKOLAR-2\Desktop\nag photos\FC2XFC1\3.JPG |
| **Rearing of bivoltine hybrid FC2 x FC1** | **Cocoon yield obtained through FC2 x FC1 bivoltine hybrid** |

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

**PART XIII - LINKAGES**

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

|  |  |
| --- | --- |
| **Name of organization** | **Nature of linkage** |
| KSDA | Training programmes, diagnostic field visits, surveys, meetings etc |
| KSDH | Training programmes, diagnostic field visits, surveys, meetings etc |
| Veterinary & Animal husbandry | Training programmes, diagnostic field visits, surveys, meetings etc |
| Sericulture | Training programmes, diagnostic field visits, surveys, meetings etc |
| Karnataka Milk Federation | Training programmes, diagnostic field visits, surveys, meetings etc |
| Dept. of Fisheries | Meetings etc |
| MANAGE, Hyderabad & SAMETI, (South), UAS, Bangalore | Trainings, Field visits, Bimonthly workshops, DAESI etc. |

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the scheme** | **Date/ Month of initiation** | **Funding agency** | **Amount (Rs.)** |
| Enhancing farmers income and welfare | 2016-17 | KAPC | 10 lakhs |
| Enhancing farmers income and welfare | 2017-18 | KAPC | 05 lakhs |
| Enhancing farmers income and welfare | 2018-19 | KAPC | 10 lakhs |

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

**Coordination activities between KVK and ATMA :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Programme** | **Particulars** | **No. of programmes attended by KVK staff** | **No. of programmes Organized by KVK** | **Other remarks**  **(if any)** |
| **01** | **Meetings** | **DFAC-**District farmers  Advisory committee  **BFAC-**Block farmer advisory committe  **GB-**Governing body meeting  **MC-**Managing committee | 8 | 8 | **-** |
| **02** | **Research projects** |  |  |  |  |
| **03** | **Training programmes** | Online & Offline trainings | 18 | 18 |  |
| **04** | **Demonstrations** |  |  |  |  |
| **05** | **Extension Programmes** | Joint visit by Scientists & extension workers field visit | 25 | 25 |  |
|  | Kisan Mela |  |  |  |  |
|  | Technology Week |  |  |  |  |
|  | Exposure visit |  |  |  |  |
|  | Exhibition |  |  |  |  |
|  | Soil health camps |  |  |  |  |
|  | Animal Health Campaigns |  |  |  |  |
|  | Others (Pl. specify) |  |  |  |  |
| **06** | **Publications** |  |  |  |  |
|  | Video Films |  |  |  |  |
|  | Books |  |  |  |  |
|  | Extension Literature |  |  |  |  |
|  | Pamphlets |  |  |  |  |
|  | Others (Pl. specify) |  |  |  |  |
| **07** | **Other Activities** (Pl.specify) |  |  |  |  |
|  | Watershed approach |  |  |  |  |
|  | Integrated Farm Development | Gave information about IFS implementation | 4 | 4 | - |
|  | Agri-preneurs development |  |  |  |  |

**13D. 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** |
|  |  |  |  |  |  |

**13E. 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** |
|  |  |  |  |  |  |

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

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

**13G. Kisan Mobile Advisory Services**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Month** | **No of Advisories** | **Message type (Text/Voice)** | **SMS/voice calls sent (No.)** | | | | | | **Total SMS/Voice calls sent (No.)** | **Farmers benefitted (No.)** |
| **Crop** | **Livestock** | **Weather** | **Marketing** | **Awareness** | **Other enterprises** |
| January | 1 | Text Message | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 24739 |
| February | 1 | Text Message | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 24739 |
| March | 1 | Text Message | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 24739 |
| April | 2 | Text Message | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 46205 |
| May | 0 | Text Message | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| June | 0 | Text Message | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| July | 1 | Text Message | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 24739 |
| August | - | - | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| September | - | - | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| October | - | - | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| November | - | - | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| December | - | - | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Total | **6** | **0** | **3** | **0** | **0** | **0** | **0** | **3** | **6** | **145161** |

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

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Demo Unit | Year of  establishment | Area  (ha) | Details of production | | | Amount (Rs.) | | Remarks |
| Variety | Produce | Qty. | Cost of inputs | Gross income |
| 1. | Curry leaf block | 2016-17 | 0.01 | Suhasini | leaves | 26 | - | 806 | NIL |

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name  of the crop | Date of sowing | Date of harvest | Area (ha) | Details of production | | | | Amount (Rs.) | | | Remarks |
| Variety | Type of Produce | Qty. | | Cost of inputs | | Gross income |
| Cereals |  |  |  |  |  |  | |  | |  |  |
| Pulses |  |  |  |  |  |  | |  | |  |  |
| Oilseeds |  |  |  |  |  |  | |  | |  |  |
| Fibers |  |  |  |  |  |  | |  | |  |  |
| Spices & Plantation crops | | | | | | | | | | | |
| Floriculture |  |  |  |  |  |  | |  | |  |  |
| Fruits | Banana |  |  | Elakki | Fruit | 7 kg | | - | | 350 |  |
| Vegetables | Cabbage |  | 0.005 | - | head | 18 nos | | - | | 180 |  |
|  | Beetroot |  | 0.004 | local | bulbs | 5 kg | |  | | 150 |  |
|  | Menthya |  |  | local | leaf | 3.75 kg | | - | | 40 |  |
|  | Dill |  |  | local | leaf | 5.5 kg | |  | | 220 |  |
|  | Sweet corn |  |  |  | cob | 0.5 kg | |  | | 20 |  |
|  | Bitterguord |  |  | local |  | 0.25 kg | |  | | 10 |  |
|  | Green chilly |  |  | local | vegetable | 0.25 kg | |  | | 10 |  |
|  | Drumstick |  |  | Bhagya | Pods | 11 kg | |  | | 120 |  |
|  | Coriendar |  |  | local | Leafy vegetable | 66 kg | |  | | 1716 |  |
|  | palak |  |  | local | Leafy vegetable | 13.75 kg | |  | | 1550 |  |
|  | Raddish |  |  | Local | Root vegetable | 26 kg | |  | | 520 |  |
| Others (specify) | | | | | | | | | | | |
|  |  |  |  |  |  |  |  | |  | |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl.  No. | Name of the Product | Qty | Amount (Rs.) | | Remarks |
| Cost of inputs | Gross income |
| 1 | Waste Decomposer | 1064 | - | 31885 | NIL |

**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 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**14E. Utilization of hostel facilities : NA**

Accommodation available (No. of beds)

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

**14F. Database management**

|  |  |  |
| --- | --- | --- |
| **S.No** | **Database target** | **Database created** |
|  | Maintenance of farmers database (Training & extension activities)  & Soil & water Analysis | 16142 |
|  | Maintenance of OFT & FLD farmers list | 149 |
|  | Maintenance of Farm activity (Cash receipts & Payments) | 2012 to 2021 |

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

1. **Rain Water Harvesting Structure**

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

1. **Micro-irrigation systems**

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

**PART XV – SPECIAL PROGRAMMES**

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Agro advisories | | | Farmers awareness programmes | |
| Sl No. | No of Agro advisories generated | No of farmers registered for agro advisories | No of farmers benefitted | No of programmes | No of farmers benefitted |
| 1 | 104 | 7000 | 7000 | 14 | 771 |

**15.3 Fertilizer awareness programme organized:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **State** | **Name of KVK** | **Details of Activities/programmeOrganised** | **Number of Chief Guests** | **No. of Farmers attended program** | **Total participants** |
| Karnataka | Kolar | Fertilizers awareness programme  dtd:18.06.2021 | 5 | 65 | 70 |

**15.4 Seed Hub**

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

**15.5 CFLD on Oilseeds: NA**

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

**15.6 CFLDs on Pulses:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sl.No. | Crop | Varieties demonstrated and check | Allocated | | Implemented | |
| Area (ha) | Demos (No.) | Area (ha) | Demos (No.) |
| 1. | Redgram | BRG-1 | 14 | 35 | 14 | 35 |
|  | Total |  | 14 | 35 | 14 | 35 |

**15.7 Krishi Kalyan Abhiyan (Aspirational districts)**

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

**15.8 Micro-Irrigation**

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

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

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

**15.10 SCSP:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Farmer Training | | Women Farmer Training | | Rural Youths | | Extension Personnel | | OFT (No of Technologiess) | Number of farmers involved | | | Participants in extension activities (No.) | Production of seed (q) | Production of Planting material (Number in lakh) | Production of Livestock strains (Number in lakh) | Production of fingerlings (Number in lakh) | Testing of Soil, water, plant, manures samples (Number) |
| No. of Trainings/Demos | No. of Farmers | No. of Trainings/Demos | No. of Women Farmers | No. of Trainings/Demos | No. of Youths | No. of Trainings/Demos | No. of Ext. Person | On- farm trials | Frontline demos | Mobile agro- advisory to farmers |
| 6 | 365 | 1 | 20 | 3 | 110 | - | - | - | - | 180 | 5 | 100 | - | - | - | - | - |

**Implementation of SCSP Programme at KVK, Kolar.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. | Name of the Centre | | : | KVK, Kolar |
| 2. | Start of SCSP  Programme at the Centre (give month and year) | | : | October - 2020 |
| 3. | Details of SCSP Village (s) adopted under | | : | Village(s): Chokkareddipalli & Kadudevandahalli |
| : | Block: Srinivasapura |
| : | District: Kolar |
| 4. | | Technological Interventions like demonstrations and training programmes proposed | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl.  No | Name of the Technology | Components | Number of Demos/  Training | Stage of the activity |
|  | Demonstration of dry land horticulture fruit crops | Five each saplings of Jamun, Amla, Custard apple, Jackfruit and Lime for each farmer | 25 (10 ha) | Under progress |
|  | Introduction of multicut fodder sorghum for sustained fodder availability | COFS-31 (500 gm) | 40(8 ha) | Under progress |
|  | Integrated crop management in Mango | Sunhemp (10kg)  Fruitfly traps & Lures (4+3 nos)  Mango Special (6kg)  Pruning Saw (1 no)  Hexaconozole (500ml)  Thiamethoxam (250 gm)  Wettable sulphur (1 kg)  Lambda cyalhothrin (250 ml) | 30 (12 ha) | Under progress |
|  | Demonstration of Hygienic milk production through cow mats | cow mats | 35 No | Distributed cow mats |
|  | Introduction of improved poultry birds for additional income | Swarnadhara chicks | 50 | Distributed chicks |
|  | Training on improved cultivation practices for higher yields in mango with special emphasis on organic cultivation and exploring market avenues | 1 day training | 02 | Organized |
|  | Integrated crop management in solonacious crops | 1 day training | 01 | Organized |
|  | Preparation of bio crafts for additional income generation for adolescent girls (Rural youth) | 5 days training | 01 | Organized |
|  | Training cum Animal health camp for addressing common diseases in livestock | 1 day programme | 02 | Organized |
|  | Demonstration of Scientific pruning of mango orchards for better growth and yields | Pruning saw | 55 | Distributed |
|  | Demonstration and installation of vermicompost units for better utilization of organic waste | Vermicompost bags | 10 | Distributed |

**15.11 NARI**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Achievement** | |
| **Number of activity** | **No. of farmers/ beneficiaries** |
| OFTs – Nutritional Garden (activity in no. of Unit) |  |  |
| OFTs – Bio-fortified Crops (activity in no. of Unit) |  |  |
| OFTs – Value addition(activity in no. of Unit/Enterprise) |  |  |
| OFTs - Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise) |  |  |
| FLDs – Nutritional Garden (activity in no. of Unit) | 1 | 25 |
| FLDs – Bio-fortified Crops (activity in no. of Unit) |  |  |
| FLDs – Value addition(activity in no. of Unit/Enterprise) |  |  |
| FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise) |  |  |
| Trainings |  |  |
| Extension Activities |  |  |

**15.12 KVK Portal**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No. of Events added by KVKs** | **No. of Facilities added by KVKs** | **Filled Report on Package of Practices (Y/N)** | | | | **Filled Profile Report (Y/N)** | | | | | | | |
| **Crop** | **Livestock** | **Fisheries** | **Horticulture** | **Employees** | **Posts** | **Finance** | **Soil Health Cards** | **Appliances** | **Crops** | **Resources** | **Fish** |
| 1367 | 5 | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |

**15.13 KSHAMTA**

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

**15.14 DFI:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl** | **District** | **Taluks** | **Villages** | **Farmers (No.)** | **Average Benchmark Income (Rs/year)** | **Crops/ enterprises** | **KVK Interventions** | **Additional Net Income generated due to KVK interventions (Rs/year)** | **Total income of farmer (Rs/year)** |
|  | Kolar | Kolar | Yadahalli | 50 | 2,82,667 | Ragi, Mulberry,Tomato, Potato, Marigold, Nutritional security, Fodder sorghum | 1. Demonstration on Assessment of various nutrient management practices in Potato 2. Introduction of BRG-4 in   Redgram and Disease and Pest Management.   1. Demonstration on silage techniques for decreasing inter calving period and better milk production 2. Demonstration on Azolla production techniques for enhancing milk yield production 3. Demonstration on Fodder cafeteria for continuous supply of green fodder | 4,06,771 | 6,89,438 |
|  | Kolar | Srinivaspura | Kadudevandahalli | 50 | 3,17,106 | Sericulture, mango, dairy, sheep rearing, Ragi, tomato,chilli, chrysanthemum, Fodder, Horsegram | 1. Integrated insect pest and disease management in Tomato 2. Integrated crop management in mango 3. Demonstration on Ragi variety KMR 630 for drought mitigation and delayed sowing 4. Demonstration on use of VAM and PSB for reducing phosphorus fixation and quality leaf production in Mulberry 5. Improved production technology in rose onion 6. Assessment of different liquid microbial consortia in mulberry for higher yield 7. Management of uzifly in silkworm rearing 8. Recycling of Seri farm residue with waste decomposer consortia for quality compost production | 4,65,205 | 7,82,311 |
|  | Kolar | Bangarpet | Thimmasandra | 12 | 2,85,000 | Tomato, beans, Ragi, Redgram, Sheep rearing, dairy | 1. Integrated Crop Management in Field bean 2. Assessment of Spray of Nano Nitrogen fertilizer for better nutrient use efficiency in tomato 3. Demonstration on silage techniques for decreasing inter calving period and better milk production 4. Demonstration on Azolla production techniques for enhancing milk yield production 5. Demonstration on Fodder cafeteria for continuous supply of green fodder 6. Integrated management of yellow mosaic virus in pole bean | 85000 | 370000 |
|  | Kolar | Malur | Thippasandra | 17 | 4,06,785 | 1. Tomato, carrot, Coriander, Groundnut, Potato | 1. Assessment of different compost culture in composting of tomato waste 2. Management of Stem rot disease in Groundnut 3. Demonstration on Ragi variety KMR 630 for drought mitigation and delayed sowing | 1,11,896 | 6,20,400 |

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

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

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Crop varieties/hybrids assessed/ demonstrated** | **Farmer’s feedback** |
|  |  |  |

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

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Agronomic practices** | **Farmer’s feedback** |
|  |  |  |

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

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Pest and disease management in crops** | **Farmer’s feedback** |
|  |  |  |

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

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

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

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

**PART XVII - FINANCIAL PERFORMANCE**

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bank account** | **Name of the bank** | **Location** | **Branch code** | **Account Name** | **Account Number** | **MICR Number** | **IFSC Number** |
| With Host Institute | SBI | Bagalkot | 17867 | Current A/c | 30611531173 | 587002104 | SBIN0017867 |
| With KVK | SBI | Zilla adalitha bhavan , tamaka | 61689 | Current A/C | 34004434216 | 563002118 | SBIN0061689 |

**17B. Utilization of KVK funds during the year 2021-22(Rs. in lakh)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 138.83 | 10386603 | 9445054 |
| 2 | **Traveling allowances** | 1.00 |  | 3680 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 2.50 | **7,37,076/-** | 240111 |
| *B* | POL, repair of vehicles, tractor and equipments | 2.50 | 179836 |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 1.50 | 192801 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 0.50 | 37009 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 3.50 | 173259 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 1.00 | 53565 |
| *G* | Training of extension functionaries | 0.25 | 4200 |
| *H* | Extension Activities | 0.50 | - |
| *I* | Farmers Field School | 0.60 | 59594 |
| *J* | EDP (2 Nos) | 0.50 | 17500 |
| *K* | Soil & Water testing & Issue of soil Health Cards | 0.50 | 1062 |
| *L* | Nutrigardens | 0.25 | 5300 |
| *M* | Maintenance of buildings | - | - |
| *N* | Library | 0.05 | 1600 |
| **TOTAL (A)** | |  |  |  |
| **B. Non-Recurring Contingencies** | |  |  |  |
| 1 | **Works** |  |  |  |
| 2 | **Equipment including SWTL & Furniture** |  |  |  |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) |  |  |  |
| 4 | **Library** (Purchase of assets like books & journals) |  |  |  |
| **TOTAL (B)** | |  |  |  |
| **C. REVOLVING FUND** | |  |  |  |
| **GRAND TOTAL (A+B+C)** | | **153.98** |  | **10414571** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Opening balance as on 1st January** | **Income during the year** | **Expenditure during the year** | **Net balance in hand as on 31st December of each year** |
| January to December 2019 | 1320532 | 319365 | 403155 | 1236742 |
| January to December 2020 | 1236742 | 473028 | 263843 | 1445927 |
| January to December 2021 | 1445927 | 507490 | 477165 | 1476252 |

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

| **Name of the staff** | **Designation** | Title of the training programme | Institute where attended | Dates |
| --- | --- | --- | --- | --- |
| Dr. Ambika D.S | Scientist(Plant Protection) | Leadership skills for improving performance for agri and allied sectors | MANAGE, Hyderabad | 04th Jan.2021 |
| Dr. Ambika D.S | Scientist(Plant Protection) | WEAT certified wine workshop | Karnataka wine board. | 07th Jan.2021 |
| Dr. Ambika D.S  Dr. K.R. Shashidhar | Scientist  (Plant Protection)  Scientist (Sericulture) | 5 Days training programme on Leadership skills for improving performance in agri and allied sectors | MANAGE,  Hyderabad | 04th to 08th January 2021 |
| Dr. K.R. Shashidhar | Scientist (Sericulture) | 4 Days training programme on Extension management approaches for promotion of sericulture industry | MANAGE,  Hyderabad | 19th 22nd January 2021 |
| Dr. Ambika D.S | Scientist(Plant Protection) | A new road map to promote IPM in India | NCIPM | 28th Jan 2021 |
| Dr. Ambika D.S  Dr. K.R. Shashidhar | Scientist  (Plant Protection)  Scientist (Sericulture) | ISMPP 41st Annual Conference and National e-symposium on Innovative approaches in plant health management | University of Horticulture Sciences, Bagalkot | 28th -30th January 2021 |
| Dr. Ambika D.S  Dr. K.R. Shashidhar | Scientist  (Plant Protection)  Scientist (Sericulture) | 5 Days training programme on Suastainable farmers friendly transferable technologies to enhance income of farmers in Aridzone | ICAR-CAZRI,Jodhpur  MANAGE Hyderabad | 15th -19th February 2021 |
| Dr. Ambika D.S | Scientist(Plant Protection) | Field diagnosis and management of plant parasitic nematodes | NIPHM, Hyderabad | 1st -5th , March, 2021 |
| Mrs. Swathi | SMS(Agrometeorology) | Climate Change Adaptation in Agriculture | MANAGE, Hyderabad | 23rd -26th March .2021 |
| Dr. Jyothi Kattegoudar, | Scientist(Horticulture) | Bhoomi suposhan Jan jagran National Campaign | ICAR, New Delhi | 15th April 2021 |
| Dr. Ambika D.S | Scientist (Plant Protection) | Research, extension advisory and project formulation workshop-NZ | UHS, Bagalkot | 03rd – 05th June.2021 |
| Dr. Anil kumar S  Dr. Ambika D.S | Scientist (SS&AC)Scientist(Plant Protection) | Research, extension advisory and project formulation workshop | UHS, Bagalkot | 09th -11th .June.2021 |
| Dr. Jyothi Kattegoudar, | Scientist(Horticulture) | Regional horticultural research, extension, advisory and project formulation workshop for southern zone -2020-21 | RHREC, Bengaluru | 08th June.2021 to 10th June.2021 |
| Dr. Jyothi Kattegoudar,  Dr. K.R. Shashidhar | Scientist(Horticulture)  Scientist (Sericulture) | Training programme on virtual farmer’s filed school | UAHS, Shivamogga | 14th June.2021 |
| K. Thulasiram, | Senior Scientist &Head | Regional Horticulture Research, Extension Advisory And Project Formulation Workshop 2020-21 (Southern Zone) | ADRE,Bengaluru | 8th -10th June 2021 |
| Dr. Ambika D.S | Scientist(Plant Protection) | Recent advances in sustainable integrated disease management in plantation crops | ICAR-Indian Institute of Oil Palm Research, Pedavegi, AP | 06th July.2021 to 08th July.2021 |
| Dr. Jyothi Kattegoudar, | Scientist(Horticulture) | Sustainable integrated cropping and farming system models with special reference to banana for enhanced income for farmers | NRC Banana, Tiruchirappalli | 07th July.2021 |
| Mrs. Swathi | SMS(Agrometeorology) | Training on Dynamic Crop Weather Calender developed under GKMS Scheme | IMD, New Delhi | 15th July.2021 |
| Dr. Ambika D.S | Scientist (Plant Protection) | ICAR-NCIPM National webinar on “ Integrated pest management : A paradigm shift | ICAR-NCIPM | 27th August.2021 to 28th August.2021 |
| Mrs. Swathi | SMS(Agrometeorology) | Customized training cum interaction on use of pest and disease forewarning models and inventories on significant weather patterns | IMD, New Delhi | 04th August.2021 |
| Mrs. Swathi | SMS(Agrometeorology) | Followup session on Training on Dynamic Crop Weather Calender developed under GKMS Scheme | IMD, New Delhi | 05th August.2021 |
| Dr. K.R. Shashidhar | Scientist (Sericulture) | Technologies based organic farming : conservation and sustainable agriculture | NAHEP – College of Horticulture and forestry, Central Agricultural University, Imphal | 13th & 14th Sep 2021 |
| Dr. Ambika D.S | Scientist(Plant Protection) | Advances in integrated pest management in strategies for important crops of Karnataka kearala | ATARI Zone XI and NICPM, New Delhi | 21st October.  2021 to 23rd October.2021 |
| Dr. K.R. Shashidhar | Scientist (Sericulture) | International Webinar Conference on "Alternate Cropping Systems for Climate Change and Resource Conservation" from 29 September to 01 October 2021. | ICAR-Indian Institute of Farming Systems Research Modipuram, Meerut-250110 | 29th September to 01st October 2021. |
| Dr. K.R. Shashidhar | Scientist (Sericulture) | National Conference (virtual mode) on Integrated Farming Systems: A Tool for Enhancing Income and Nutritional Security | ICAR-RCER, Patna | 5th -7th October 2021 |
| Dr. K.R. Shashidhar | Scientist (Sericulture) | “Mass Production of Fungal and Bacterial agents A, scope for budding startup” | College of Horticulture and Forestry, Central Agricultural University (Imphal), Pasighat-791102, Arunachal Pradesh | 2nd & 03rd November, 2021 |
| Dr. Ambika D.S | Scientist(Plant Protection) | ICAR-IIHR Technologies for dissemination through KVK’s” | IIHR, Bengaluru | 17th Dec.2021 to 18th Dec.2021 |

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