**ICAR-ATARI, Pune**

**ANNUAL ACTION PLAN OF KVK AMRAVATI-1**

**(1stJanuary to 31st December, 2024)**

1. GENERAL INFORMATION ABOUT THE KVK

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Address with PIN code | Telephone | | E mail | Website address |
| Krishi Vigyan Kendra, Ghatkhed, Near Tapovaneshwar Temple, Post Pohara, Tq. & Dist. Amravati – 444 904 | Office | FAX | kvkgamravati  @rediffmail.com | www.kvkghatkhed.org |
| NA | NA |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Address | Telephone | | E mail | Website address |
| Office | Fax |
| Shramsafalya Foundation, Amravati “Chirantan”, Madhuban Colony, Camp, Amravati- 444603 | 0721-2662696 | 0721-2661199 | kvkgamravati@rediffmail.com |  |

1.3. Name of the Senior Scientist and Head with phone & mobile no.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Telephone / Contact | | | |
| Dr. A. P. Kalaskar | Telephone / Contact | Residence | Mobile | Email |
| NA | NA | 9890069568 | kvkgamravati@rediffmail.com |

1.4. Year of sanction& type of host organization:1995 NGO

**1.5. Staff Position (as on December 31, 2023)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Sanctioned post** | **Name of the incumbent** | **Discipline** | **If Permanent, Please indicate** | |  | **If Temporary, pl. indicate the consolidated amount paid (Rs./month)** |
| **Current**  **Pay Band** | **Current Pay Matrics** | **Date of joining** |
|  | Senior Scientist and Head | Dr. A.P. Kalaskar | Extension Education | Rs.131400-210800 | Rs.181800 | 18/06/2004 |  |
|  | Subject Matter Specialist | Dr. A.P. Phuse | Horticulture | Rs.56100-177500 | Rs107500 | 20/06/1996 |  |
|  | Subject Matter Specialist | MrA.M.Tayade | Extension Education | Rs.56100-177500 | Rs 92700 | 17/04/2003 |  |
|  | Subject Matter Specialist | Dr. P. J. Kadu (Kakade) | Home  Science | Rs.56100-177500 | Rs 82400 | 11/07/2008 |  |
|  | Subject Matter Specialist | DrS.P.Kathale | Animal  Science | Rs.56100-177500 | Rs 82400 | 22/07/2008 |  |
|  | Subject Matter Specialist | Mr.P.N. Mendhe | Agronomy | Rs.56100-177500 | Rs 75400 | 01/04/2011 |  |
|  | Subject Matter Specialist | Mr S.A. Pachkawade | Plant  Pathology | Rs. 35400-112400 | Rs 74300 | 01/01/1997 |  |
|  | Programme Assistant | Mr R.S. Rathod | Agriculture Engineering | Rs35400-112400 | Rs 70000 | 02/04/1999 |  |
|  | Computer Programmer | Mr P.P. Ghogare | Computer Science | Rs35400-112400 | Rs 64100 | 01/06/2004 |  |
|  | Farm Manager | Mr J.P. Korate | Agriculture Economics | Rs35400-112400 | Rs 74300 | 18/06/1996 |  |
|  | Accountant/Superintendent | Mr R.G. Thakare | Commerce | Rs35400-112400 | Rs74300 | 10/07/1996 |  |
|  | Stenographer | Mr V.V. Bhatkar | Art | Rs.25500-81100 | Rs50400 | 01/06/1996 |  |
|  | Driver 1 | Mr S.N. Bonde |  | Rs.21700-69100 | Rs38300 | 01/05/1999 |  |
|  | Driver 2 | Vacant |  | Rs.21700-69100 |  |  | Vacant due to Retirement |
|  | Supporting staff 1 | Mr. S.W. Bhuskade |  | Rs.18000-56900 | Rs.33400 | 01/06/1996 |  |
|  | Supporting staff 2 | Vacant |  | Rs.18000-56900 |  |  | Vacant due to Retirement |

**1.6. Total land with KVK (in ha): 23.60 ha**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Item** | **Area (ha)** |
| 1 | Under Buildings | 0.50 |
| 2. | Under Demonstration Units | 1.80 |
| 3. | Under Crops (Kharif ) | 10.43 |
| 4. | Horticulture | 2.46 |
|  | Nursery | 0.40 |
| 5. | Pond | 1.80 |
| 6. | Others( if any) Fodder crops | 0.52 |
|  | Pasture land | 1.20 |
|  | Fallow land | 1.17 |
|  | Bunds & Trenches | 0.60 |
|  | Garden | 0.40 |
|  | Internal Roads | 2.32 |
|  | **TOTAL** | **23.60** |

**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 |  | 01.03.1999  30.03.2000 | 411.44 | 2703213.00  1993329.00 | -- | -- | -- |
| 2. | Farmers Hostel |  |  | 307.00 |  | -- | -- | -- |
| 3. | Staff Quarters (6) |  | 31.03.2006 | 398.00 | 3061961.00 | -- | -- | -- |
| 4. | Demonstration Units (2)  Demonstration Units(1) |  | 31.03.1998 | 140.45 | 80962.00 | -- | -- | -- |
| 31.03.2008 | 80.00 | 437000.00 | -- | -- | -- |
| 5 | Fencing |  | 12.12.1997 | 3.02 Km | 618078.00 | -- | -- | -- |
| 6 | Rain Water harvesting system |  | -- | -- | -- | -- | -- | -- |
| 7 | Threshing floor |  | -- | -- | -- | -- | -- | -- |
| 8 | Farm godown |  | -- | -- | -- | -- | -- | -- |
| 9 | ICT lab |  | -- | -- | -- |  |  |  |
| 10 | Other-Internal Road |  | 16.1.1998 | 2.0km | 221131.00 |  |  |  |
| 11 | Bio Control Lab | NHM & Host institute | 31.01.2018 | 650.32 | 14000000.00 | -- | -- | -- |

B) Vehicles (as on 31 Dec 2023)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
| Kawasaki Bajaj | 1996-97 | 41230.00 | -- | Needs replacement |
| Tractor (Mahindra-Sarpanch 575) DI | 2010-11 | 555000.00 | 18821 hrs. | Needs replacement |
| Tractor (Massi Fergusson)-1035 DI | 2012-13 | 510000.00 | 12294 hrs. | Good |
| Mahendra Bolero (Jeep) | 2015-16 | 755000.00 | 167512 k.m. | Good |

C) Equipments & AV aids

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the equipment** | **Year of purchase** | **Cost (Rs.)** | **Present status** |
| **Equipments** |  |  |  |
| **Office Equipment & A V Aids** |  |  |  |
| Photocopier | 2005-06 | 53339.00 | Needs replacement |
| Fax machine | 2006-07 | 6800.00 | Needs replacement |
| Genset | 2004-05 | 51000.00 | Needs replacement |
| Inverter | 2004.05 | 21500.00 | Needs replacement |
| Camera Kodak | 1996-97 | 1600.00 | Good |
| V C P | 1996-97 | 10690.00 | Good |
| Television | 1996-97 | 13500.00 | Good |
| Slide Projector | 1996-97 | 14125.00 | Good |
| Over head projector | 1996-97 | 6611.00 | Good |
| Spring type board | 1996-97 | 1582.00 | Good |
| Magnetic Board | 1996-97 | 3134.00 | Good |
| Felt Cover Notice Board | 1996-97 | 1468.00 | Good |
| LCD Projector | 2005-06 | 79000.00 | Good |
| Split Ac (3 Nos) | 2016-17 | 118920.00 | Good |
| Book Case (2 Nos) | 2016-17 | 11000.00 | Good |
| RO Water Purifier | 2016-17 | 38500.00 | Good |
| Canon Camera and tripod | 2016-17 | 39000.00 | Good |
| Display material- Boards | 2016-17 | 51758.00 | Good |
| LED TV | 2016-17 | 51000.00 | Good |
| LCD Projector (2 Nos) | 2016-17 | 83800.00 | Good |
| Display material | 2016-17 | 187230.00 | Good |
| Laptop | 2016-17 | 29500.00 | Good |
| Desktop | 2016-17 | 30300.00 | Good |
| Printer | 2016-17 | 9700.00 | Good |
| Printer No. 03 | 2020-21 | 40497.00 | Good |
| Water Cooler Blue Star No. 01 | 2020-21 | 36750.00 | Good |
| T V – Onida 43” FIZ-R1 No. 01 | 2020-21 | 27650.00 | Good |
| Desktop-PC No . 02 | 2020-21 | 69800.00 | Good |
| Logitech web cam | 2020-21 | 15300.00 | Good |
| HP Headset with microphone | 2020-21 | 11920.00 | Good |
| Epson Projector No 01 | 2020-21 | 35990.00 | Good |
| ELPAP 10 epson wireless | 2020-21 | 9500.00 | Good |
| Projector Screen No 01 | 2020-21 | 4850.00 | Good |
| Laptop HHD No 01 | 2020-21 | 3580.00 | Good |
| Public Address System | 2020-21 | 49060.00 | Good |
| Farm Implement |  |  |  |
| Open well Submersible pump | 2020-21 | 23620.00 | Good |
| Rotavator | 2020-21 | 110000.00 | Good |
| Seed cum Ferti. Drill | 2020-21 | 88000.00 | Good |
| Pole Prunner HT 75 | 2020-21 | 57616.00 | Good |
| Automatic Solar Jivamrut Machine | 2020-21 | 44384.00 | Good |
| **Equipment under TSP** |  |  |  |
| Bullok drawn Three row Planter | 2022-23 | 19600 | Good |
| Flour Shifter | 2022-23 | 85000 | Good |
| Destoner cum grader cum Aspirator | 2022-23 | 105000 | Good |
| Pulveriser | 2022-23 | 65000.00 | Good |
| Dehuller | 2022-23 | 105000.00 | Good |
| Pouch band sealer | 2022-23 | 30000.00 | Good |
| Electronics weighing scale | 2022-23 | 14000.00 | Good |
| lock | 2022-23 | 480.00 | Good |
| **Soil Testing lab Equipment** |  |  |  |
| Spectrophotometer | 2004-05 | 169352.00 | Good |
| Flame photometer | 2004-05 | 64790.00 | Good |
| Conductivity bridge | 2004-05 | 16016.00 | Good |
| PF meter | 2004-05 | 15070.00 | Good |
| Chemical Balance | 2004-05 | 77000.00 | Good |
| Distilled Water Assembly | 2004-05 | 40700.00 | Good |
| Kjeldhal digestion and Destillation unit | 2004-05 | 36300.00 | Good |
| Shaker Jindal | 2004-05 | 45045.00 | Good |
| Oven Jindal | 2004-05 | 43100.00 | Good |
| Hot Plate Jindal | 2004-05 | 3300.00 | Good |
| Screw Auger ASEW | 2004-05 | 1760.00 | Good |
| Plate Grinder Jindal | 2004-05 | 22000.00 | Good |
| Atomic Absorption Spectrophotometer | 2008-09 | 894884.00 | Good |
| Air Conditioner | 2008-09 | 41100.00 | Good |
| Nitrogen Gas Cylender with regulator | 2008-09 | 15242.00 | Good |
| Nitrous Oxide gas Cylender | 2008-09 | 18512.00 | Good |

**1.8. Details of SAC meetings to be conducted in the year**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Particulars** | **Proposed date of meeting** |
| 1 | Scientific Advisory Committee – Meeting 1 | May 2024 |
| 2 | Scientific Advisory Committee – Meeting 2 | October 2024 |

1. **DETAILS OF JURISDICTION AREA UNDER KVK (No. of talukas):**

Out of the fourteen talukas in Amravati District. Seven talukas namely Achalpur, Chikhaldara, Chandur Bazar, Chandur Railway, Dharni, Dhamangaon Railway and Tiosa comes under the jurisdiction of KVK, Amravati I.

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

|  |  |
| --- | --- |
| S. No | Farming system/enterprise |
| 1 | |  |  | | --- | --- | | Shallow to medium Black soils – Rain fed | Cotton – fallow  Soybean – Gram  Jowar - sunflower – fallow s | |
| 2 | |  |  | | --- | --- | | Shallow to medium Black soil – Irrigated | Citrus – vegetable (Intercrop)  Cotton – fallow  Red gram – fellow  Soybean – Bengal gram | |
| 3 | |  |  | | --- | --- | | Medium to deep black cotton soils – Rain fed | Soybean – Vegetable  Green gram – Bengal gram  Cotton – fallow  Soybean – Bengal gram  Fallow-safflower | |
| 4 | |  |  | | --- | --- | | Medium to deep black cotton soils Irrigated – Control Irrigation | Citrus – Vegetable (Intercrop)  Cotton – Fallow  Soybean-Floriculture  Jawar – Vegetable | |
| 5 | |  |  | | --- | --- | | Deep black with salty soil Rain fed | Cotton – fallow  Green gram – safflower  Black gram – Safflower  Black gram – Bengal gram  Soybean – Bengal gram  Jowar – fallow | |

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

**a) Soil type & Topography**

|  |  |  |
| --- | --- | --- |
| Sl. No. | Agro-climatic Zone | Characteristics |
| 1 | Assured rainfall zone | * The whole district except tehasil Warud and eastern part of tehasil Tiwasa and Chandur railway fall within this zone about 81% area is under this zone. * The annual precipitation varies from 800 to 900mm; however it exceeds often in hilly Melghat tract of this zone. * More than 75% rainfall, in this zone is received in kharif season and hence, the kharif cropping system predominates in the zone. * The climate is usually hot and dry. Dharani, Chikhaldara, Daryapur, Anjangaon surji, Bhatkuli, Amravati, Nanadgaon kh.,Achalpur, Chandur bazar, a little part of Morshi and western part of Tiwasa and Chandur raily tehasil are included in this zone. * The area wise characters of soil and the prevalent cropping pattern is furnished below. * An area of tehasil Dharani and Chikhaldara in this zone is hilly and occupied mountain Satpura, popularly known as “Melghat range”. Land is extremely sloppy. Soils are very shallow to shallow. Forest occupies substantial area in these tehasils. Kharif sorghum, soybean, minor millets or and rice in same patches are the important crops of this region. The area is inhibited by tribal farmers. This tract gives good scope for development of dry land horticulture and forage crops. * The soils in tehasil Achalpur,Chandur bazar, Morshi, Amravati and Nandgaon khandeshwar are moderate to deep and predominantly vertisols and with situation of ill drainage and crop suffering from more of wet condition, during the year of relatively higher rains. Irrigation management in these soils posses some problems. Cotton predominates over sorghum. Other crops grown are soybean, red gram, green gram, black gram, etc in kharif season and wheat and Bengal gram are the rabi crops, wherever irrigation water is available. * The soils in Bhatkuli, Daryapur, Southern part of Anjangaon surji tehasil are vertisoil, deep and saline to saline alkali in reaction. Open well in tract have saline water, as result of which, the same cannot be utilized for irrigation purposes. Cotton, Soybean, Sorghum, , red gram, green gram & black gram are the major crops of the tract together with rain fed Wheat, Bengal gram and Sunflower during rabi season. Poor drainage during rainy season is rampant. Fields respectively plain. * The soils is western part of Tiwasa and Chandur railway tehasil are predominantly shallow to moderately deep with equal proportion of vertisols, entisols and inceptisols. Land is rolling and slop. In this area also cotton predominates sorghum. Soybean is making its place in the cropping system. Pulses and groundnut are the mportant crops of the region. |
| 2 | Moderate to moderately high rainfall zone : | Total Warud tehasil, part of Morshi and eastern part of Tiwasa and Chandur railway tehasil are included in this zone.   * The average rainfall received in this tract usually exceeds 900mm. * The climate is hot and dry.18.93% area of the district falls under this zone.   The soils in this area are moderate to deep having orange dominating cropping system, either on command or dug well irrigation with seasonal vegetables and also field crops like cotton, sorghum, soybean, red gram in kharif and mostly irrigated wheat in Rabi season. |

2.3 Soil Types

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Soil type | Characteristics | Area in ha |
| 1 | Medium black | - | 4.58 lakh ha. |
| 2 | Course shallow | - | 1.84 lakh ha. |
| 3 | Deep black | - | 1.21 lakh ha. |
| 4 | Saline | - | 31,170 ha. |
| 5 | Alkaline | - | 27,077 ha. |

**2.4. Area, Production and Productivity of major crops cultivated in the district (2022-23)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No | Crop | Area (ha) | Production (MT.) | Productivity (Qt./ha) |
| A | Cereals |  |  |  |
| 1 | Wheat | 40179 | 77163 | 19.18 |
| 2 | Kharif Jowar | 10839 | 16800 | 9.16 |
| 3 | Paddy | 6889 | 4046 | 4.55 |
| B | Pulses |  |  |  |
| 1 | Bengal gram | 119604 | 135633 | 13.05 |
| 2 | Green gram | 7739 | 3770 | 1.64 |
| 3 | Black gram | 1906 | 1912 | 1.29 |
| 4 | Red gram | 111658 | 114759 | 10.22 |
| C | Oilseeds |  |  |  |
| 01 | Soybean | 252117 | 246022 | 8.57 |
| D | Cash Crops |  |  |  |
| 01 | Cotton | 253733 | 63689 lint | 3.07 lint |
| E | Plantations Crops |  |  |  |
| 1 | Nagpur Mandarin | 71507 | 589000 | 82.36 |
| 2 | Sweet Orange | 2174 | 14300 | 65.77 |
| 3 | Lime | 725 | 5770 | 79.58 |
| 4 | Banana | 955 | 23700 | 248.17 |
| 5 | Mango | 676 | 2500 | 36.98 |
| 6 | Pomogranate | 143 | 291 | 20.35 |
| 7 | Vegetable Crop | 4308 | 108436 | 251.71 |
| 8 | Spices and Condiments | 449 | 6085 | 135.52 |
| 9 | Onion | 3149 | 97585 | 309.89 |
| 10 | Chilli | 208 | 1058 | 50.86 |
| 11 | Medicinal and Aromatic | 166 | 3.0 | 0.185 |
| 12 | Floriculture crop | 91 | 492 | 54.06 |

Source: District agriculture department.

**2.5. Weather data (2023)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Month | Rainfall (mm) | Temperature 0 C | | Relative Humidity (%) | | No. of rainy days |
| Maximum | Minimum | Maximum | Minimum |
| April 2023 | 58.4 | 42.87 | **27.67** | 36.52 | 27.65 | 05 |
| May 2023 | 24.1 | 43.97 | 28.87 | 37.67 | 26.37 | 03 |
| June 2023 | 57.5 | 38.8 | 26.42 | 63.5 | 52.82 | 06 |
| July 2023 | 313.6 | 30.55 | 23.55 | 89.97 | 79.95 | 21 |
| Aug 2023 | 58.4 | 32.5 | 23.7 | 82.47 | 74.00 | 06 |
| Sept 2023 | 167.9 | 32.56 | 23.16 | 85.82 | 77.72 | 13 |
| Oct 2023 | 7.1 | 32.9 | 20.52 | 76.75 | 66.1 | 01 |
| Nov 2023 | 50.5 | 33.1 | 15.2 | 70.7 | 49.7 | 03 |
| Dec 2023 | 5.3 |  |  |  |  | 00 |
| Total | 742.8 |  |  |  |  | 58 |

* Average annual rainfall of Amravati district : 851.40 mm
* Actual rainfall from 1st April 2023 to 31st Dec 2023 : 742.8 mm

Source: State Agriculture Department, Amravati

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Production** | **Productivity** |
| **Cattle** | | | |
| *Crossbred* | 48726 | 184.99 | 6.755 |
| *Indigenous* | 278150 | 289.58 | 0.937 |
| **Buffalo** | 129627 | 505.77 | 3.078 |
| **Sheep** | 83200 | 11686 | -- |
| **Goats** | 340681 | 54.07 | 0.143 |
| **Pigs** |  |  |  |
| *Crossbred* | 84 |  |  |
| *Indigenous* | 9647 |  |  |
| **Rabbits** | 95 |  |  |
| **Poultry** | | | |
| Hens (*Crossbred)* | 201815 | 759.85 | 31.60 |
| *Desi* | 116268 | 141.52 | **--** |
| **Category** |  | Production (Q.) | Productivity |
| Fish (Reservoir) |  |  |  |

**2.7. Details of Operational area / Villages**

| **Taluka / Block** | **Name of the village** | **Major crops & enterprises** | **Major problem identified** | **Identified Thrust Areas** |
| --- | --- | --- | --- | --- |
| Chandur (B) , Chhikhaldara and  Dharni | Besakheda  Kesharpur , Lawada | Soybean , Red gram, Bengal gram , Wheat | Use of Old variety of different major crop  No use of Biofertiliser  NO use of INM and IPM  Unawareness about proper cultivation practices | Introduction of New high yielding variety of, Soybean, wheat, Summer green gram, Summer groundnut etc.  Introduction of wilt resistant variety of Red gram and Bengal gram for increasing yield .  Creation of awareness about use of biofertiliser,  Introduction of New crop production technology  Creation of awareness about soil health management  Creation of awareness about nutrient management  Creation of awareness about IPM  Crop diversification |
| Chandur bazar | Jasapur | Mandarin Orange,BananaTurmeric,Onion | Low yield and Poor quality | Improvement of production & quality in mandarin orange  Utilization of organic manure in horticultural crops |
| Chandur bazar | Beskheda | Mandarin Orange, Onion | Low yield and Poor quality | Improvement of production & quality in mandarin orange  Utilization of organic manure in horticultural crops |
| Dhamangaon railway | Anjanvati | Mandarin Orange, Turmeric, Onion, Brinjal | Imbalance use of nutrient management | Promotion of proper nutrient management in vegetable crop |
| Chandur railway | Dhanodi | Mandarin Orange, Turmeric, Onion, Brinjal, Tomato | Low yield and Poor quality  Imbalance use of nutrient management | Improvement of production & quality in mandarin orange  Utilization of organic manure in horticultural crops |
| Dharni | Chitri | Onion, Brinjal ,Tomato | Unavailability of new variety  Low yield and Poor quality | Promotion on variety proper nutrient management in vegetable crop |
| Dharni | Lawanda | Peas, Onion ,Brinjal, | Unavailability of new variety  Low yield and Poor quality | Promotion on variety proper nutrient management in vegetable crop |
| Chikhaldara | Kesharpur | Spinach ,Fenugreek ,Onion | Low yield and Poor quality | Promotion of proper nutrient management in vegetable crop |
| Tiosa | Marda | Mandarin Orange, Turmeric, Onion ,Brinjal,  Tomato | Low yield and Poor quality  Imbalance use of nutrient management | Improvement of production & quality in mandarin orange  Utilization of organic manure in horticultural crops |
| Tiosa | Mirchapur | Mandarin Orange ,Onion | Low yield and Poor quality | Promotion of proper nutrient management in vegetable crop |
| Chandur bazar | Beskheda | Soybean ,Cotton ,Pigeon pea, Bengal gram ,Wheat ,Nagpur mandarin,Onion | Low yield due to pests and diseases, Higher cost on plant protection, Lack of knowledge about the critical stages of pest and diseases, Lack of knowledge about selection of pesticides, Indiscriminate use of pesticide. | Improving the yield by promotion of IPM&IDM approach ,  Awareness about the critical stages of pests through FFS, training ,demo, kisan goshti and Field visits |
| Chandur Rly | Dhanodi | Soybean ,Cotton ,Pigeon pea, Bengal gram ,Wheat ,Nagpur mandarin | Low yield due to pests and diseases, Higher cost on plant protection, Lack of knowledge about the critical stages of pest and diseases, Lack of knowledge about selection of pesticides, Indiscriminate use of pesticide. | Improving the yield by promotion of IPM&IDM approach.,  Awareness about the critical stages of pests through FFS, training ,demo, kisan goshti and Field visits |
| Dharani | Chitri | Soybean,Pigeonpea,Bengalgram,wheat,vegetables like Brinjal,Spinach,Methi,Tomato,  Chilli | Lack of Knowledge about the pest and diseases, Lack of knowledge about the pesticides and other safer methods of pest management | Improving the knowledge of the farmers about the pest and diseases, management practices through training, FFS, demo and Field visits. |
| Chikhaldara | Kesharpur | Soybean, Pigeon pea, Bengal gram, Paddy | Lack of Knowledge about the pest and diseases, Lack of knowledge about the pesticides and other safer methods of pest management | Improving the knowledge of the farmers about the pest and diseases, management practices through training, FFS, demo ,kisan goshti and Field visits |
| Dharni | Kara | Soybean  Bengal gram  Wheat | Group Formation at Village level  Marketing Techniques  Trichoderma & its use  No use enriched compost  Use of local varieties under field crops | Skill training of farmers.  Poor environment in development of scientific leadership  Marketing techniques  Group formation & management  Create awareness about use of improved and high yielding varieties of field crop ( Soybean, Red gram Bengal gram, Jowar, Maize) Wheat |
| Nanduri | Soybean  Bengal gram  Wheat | Group Formation at Village level  Marketing Techniques  Trichoderma & its use  No use enriched compost  Use of local varieties under field crops |  |
| Chitri | Soybean  Bengal gram  Paddy | Group Formation at Village level  Marketing Techniques  Trichoderma & its use  No use enriched compost  Use of local varieties under field crops |  |
| Lawada | Soybean  Bengal gram  Paddy  Maize | Group Formation at Village level  Marketing Techniques |  |
| Chikhaldara | Kesharpur | Soybean  Jowar | Group Formation at Village level  Marketing Techniques  Trichoderma & its use  No use enriched compost  Use of local varieties under field crops | Group formation & management  Create awareness about use of improved and high yielding varieties of field crop |
| Chandur Bazar | Beskheda | Soybean  Bengal gram  Red gram | Group Formation at Village level  Marketing Techniques  Trichoderma & its use | Skill training of farmers  Create awareness about use of improved and high yielding varieties of field crop |
| Dharni | Kara | **Bengal Gram**  CRIDA Planter for sowing | High drudgery & more time required for sowing.  Not maintained Plant to Plant spacing. More seed required. | Imparting skill on CRIDA Planter ( BD)for sowing in Rabi. |
| Dharni | Chitri | **Maize**  Hand operated Rotary maize sheller for shelling | High drudgery & more time required for shelling of maize cobs . | Introduction & Imparting knowledge on Hand operated Rotary maize sheller for shelling |
| Chikhaldhara and Dharni | Kesharpur, TarubandhaKara, | **Paddy**  Mini Rice mill for milling of rice | Not received good quality of Rice & get loss after selling in local market.. | Imparting skill on mini Rice mill for timeliness operation, Reducing losses & get more profit. |
| Chikhaldharaand Dharni | Kesharpur,Kara | **Bengal Gram**  CRIDA Planter for sowing | High drudgery & more time required for sowing.  Not maintained Plant to Plant spacing .More seed required. | Introduction& Imparting skill on CRIDA Planter ( BD)for sowing in Rabi |
| Chikhaldhara | Kesharpur | **Jowar,Pigeon pea & maize**  Bullock drawn stubble collector for Collections of stubbles, weed residue & crop residues | Required more time,labours & high cost of operation for collections of stubbles, weed residue & crop residues in cultivated fields | Imparting knowledge on bullock drawn stubble collector for Collections of stubbles, weed residue & crop residues |
| Chikhaldhara | Kesharpur | **Jowar,Soyabean,paddy**  Bullock drawn three Tyne weeder for intercultural operations | Time consuming work of interculture operations | Introduction & Imparting knowledge on bullock operated three Tyne weeder |
| Chikhaldhara | Kesharpur | **Bengal gram**  Bullock operated solar sprayer for spraying | Required more time with high cost of operation and high drudgery for Spraying of insecticides | Introduction & Imparting knowledge on bullock operated solar sprayer |
| Dharni | Lawada and Rana malu | **Ground nut**  Ground nut stripper for stripping and Ground nut decorticator for decortication | High drudgery & more time required for stripping and decortication | Introduction& Imparting skill on ground nut stripper for stripping purpose and Ground nut decorticator for decortication |
| Chandur Bz. | Beskheda | Soyabean,Pigeon pea  In situe water conservation practices | Water stress to the crop during prolong moon sonic break | Training on water management. |
| Chandur Bazar | Basekheda | Calves | Low weight gain  Lower growth rate  Calf mortality | Training & Assessment on Balance diet for calf  To improve Manage mental practices to avoid calf mortality |
| Chandur Bazar | Basekheda | Cow | Low milk yield  Low resistant power  Post parturient complication | Training & Assessment on Management of partureted cow to improve milk yield and breeding efficiency |
| Dharni | Lawada | Poultry | Use of local breeds  Low weight gain  Low quality and imbalanced  Feed for poultry  Low eggs production | Training & FLD on  Introduction of new breeds with high eggs and meat production, To improve knowledge about Dual purpose backyard poultry breed and Manage mental practices |
| Dharni | Lawada | Cattle | Non availability of green fodder  Low milk yield  Low resistant power | Training and FLD on cultivation of Fodder crop,  To improve knowledge about fodder cultivation |
| Chekhaldara | Kesharpur | Goat kid | Low growth rate in kid  Low growth rate in kid  High mortality in kid | Training and FLD on Use of probiotic supplementation in goat kid, To improve Manage mental practices to avoid kid mortality |
| Chekhaldara | Kesharpur | cattle | Low milk yield  Major health problem  Reduce breeding efficiency  Intermittent diarrhea | To improve Manage mental practices to avoid parasitic infestation |
| Dharni | Nanduri | Solar Dryer | Dehydrated food kept in unhygienic condition & Unable to maintain the quality | Secure place for drying the food items. |
| Dharni | Kara | Soybean Mitten | unawareness regarding use of Protective injury saving glows/mitten | Painful Drudgery work for farm women while harvesting Soyabean |
| Dharni | Kotha, Kara, Nanduri | Milk Product | Less profit in milk marketing due to lack of proper device. | unawareness regarding use of energy saving milking devices |
| Dharni | Kara, Nanduri | Mashroom Production | No use of Agro waste.& Major deficiency of proteins in daily Diet | Major deficiency of protein |

**2.8. Priority thrust areas:**

**Agronomy**

1. Introduction of New high yielding variety of, Soybean, wheat, Summer green gram, Summer groundnut etc.
2. Introduction of wilt resistant variety of Red gram and Bengal gram for increasing yield .
3. Creation of awareness about use of biofertiliser,
4. Introduction of New crop production technology
5. Creation of awareness about soil health management

**Horticulture**

|  |  |
| --- | --- |
| **Fruit crop:**  Mandarin orange, Sweet orange, Kagzi lime, Mango, Guava, Aonla and Dry land fruit crop | Integrated nutrient Management |
| Integrated crop Management |
| Technology dissemination for quality seed & seedling production |
| Rejuvenation of old orchards |
| Improvement in mandarin orange grown on unsuitable soil |
| To encourage the farmers for dry land fruit crop plantation |
| Post harvest technology |
| **Vegetable crop:** Brinjal, Tomato, Chilli, Pumkin, Bottle gourd ,Bitter gourd | Evaluation of new varieties |
| Integrated nutrient management |
| Integrated crop management |
| Increasing the area and production of vegetable crop |
| Diversification about organic vegetable production |
| Motivate farmers to grow the vegetable under control condition |
| Quality seed and seedling production in Vegetables |
| Post harvest technology |
| **Spices Crop:** Onion ,Garlic, Ginger, Turmeric, Fennel, Ajawain | Production and management technology |
| Quality seed and seedling production |
| Evaluation of new varieties |
| Integrated nutrient management |
| Integrated crop management |
| Post harvest technology |
| **Floriculture crop:** Gaillardia ,Rose, a, Chrysanthemum, Tuberose, Gerbera, | Quality seed and seedling production |
| Enhancement of area and production |
| Cultivation under control condition |
| Integrated nutrient management |
| Integrated crop management |
| Post harvest technology |

**Plant Protection**

1. Improving the productivity by promoting IPM & IDM approach and other safer methods of pest and disease management in Btcotton,Soybean,Pigeon pea and Bengal gram and vegetables like Brinjal.

2. Improving the productivity by using recommended plant protection measures

3 Improving the knowledge of the farmers about the important crucial stages of pest and about diseases, proper time of management of pest ,importance of seed treatment by organizing farmer’s field school,trainings,demonstrations,Group discussion and field visits.

4. Improving the knowledge of farmers about the safe use and handling of pesticides.

**Agriculture Extension**

|  |  |
| --- | --- |
| **Crop/Enterprise** | **Thrust area** |
| Group Formation at Village level | Skill training of farmers.  Poor environment in development of scientific leadership |
| Use of local varieties under field crops | Create awareness about use of improved and high yielding varieties of field crop  (Soybean, Red gram Bengal gram, Jowar, Maize) Wheat, |
|  | Processing of Agriculture produce & Marketing through group formation\* |

**Other Problems related to Aspects**

|  |  |  |
| --- | --- | --- |
| **Aspects** | **I Rank** | **II Rank** |
| Crop Production | Seed treatment | High Yielding Variety |
| Animal Production | Balance ration in milch animals | Knowledge about animal diseases |
| Horticulture | Recommended varieties of vegetables | Plant protection measures |
| Water conservation | Contour farming | In situ soil & water conservation |
| Small farm Mechanization | Sowing implements | Drudgery reducing implements |
| PHT | Primary processing | Mini dal mil |
| Women empowerment | Malnutrition among children in tribal area | Value addition in food |
| Agriculture occupation | Backyard poultry | Goat |

**List of location specific training needs**

|  |  |  |
| --- | --- | --- |
| **Farmers & farm women** | **Rural Youth** | **Extension Functionaries** |
| Community organized farming | Subsidiary occupations | Communication Skills |
| Market intelligence | Value addition | Training methods |
| Contract farming and corporate farming | ICT in agriculture | PRA techniques |
| Subsidiary occupations | Farm mechanization | Public private partnership |
| Value addition | Custom hiring | Contract farming and corporate farming |
| Soil and water conservation |  | IT use in agriculture |
| Rain Water Harvesting |  |  |
| Water Scaling |  |  |
| Integrated Nutrient Management |  |  |

**Agri Engg**

1) Introduction & Imparting knowledge on CRIDA Planter (BD) for timeliness operation, efficient application of Inputs, reducing losses & drudgery in sowing for Kharif & Rabi seasons

2) Imparting knowledge on Mini Rice mill for timeliness operation, Reducing losses & drudgery

3) Introduction &Imparting knowledge on bullock operated three Tyne weeder for intercultural operations

4) Imparting knowledge on bullock drawn stubble collector for collection of crop residues

5) Introduction & Imparting knowledge on hand operated Rotary maize Sheller for reducing losses & drudgery in shelling of Maize cobs

6) Introduction through training on In situe water conservation practices and BBF technology for sowing

7) Introduction & Imparting knowledge on bullock operated solar sprayer through training 8) ) Introduction & Imparting knowledge on Ground nut stripper for stripping and Ground nut decorticator for decortications.

**Home Science**

1. Creating awareness about Iron Deficiency among Adolescents girl.
2. Secure place for drying the food items
3. Creating awareness about protein Energy malnutrition among Tribal family
4. Heavy Drudgery of farm women while harvesting Soybean.
5. Less profit in milk production due to lack of proper device.
6. Lack of awareness about improved technologies for drudgery reduction.
7. Loss of Nutrient in daily diet in tribal area.

**Animal Science**

|  |  |
| --- | --- |
| **Crop/Enterprise** | **Thrust area** |
| Cattle | Production and Management |
| Cow calf | Nutrient Management |
| Poultry | Poultry Management |
| Cattle | Fodder Management |
| Goat kid | Nutrient Management |
| Cattle | Diseases Management |

**3. TECHNICAL ACHIEVEMENTS**

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

|  |  |  |  |
| --- | --- | --- | --- |
| **OFT** | | **FLD** | |
| **(1)** | | **(2)** | |
| Number of OFTs | Number of Farmers | Area (ha) | Number of Farmers |
| **12** | **102** | **84** | **415** |
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| --- | --- | --- | --- |
| **Training** | | **Extension Activities** | |
| **(3)** | | **(4)** | |
| Number of Courses | Number of Participants | Number of activities | Number of participants |
| **117** | **3367** | **326** | **9952** |
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| --- | --- | --- | --- |
| **Seed Production (Qtl.)** | **Planting material (Nos.)** | **Livestock, poultry strains and Fish seed prod. (No’s)** | **Soil, water and plant Samples** |
| **(5)** | **(6)** | **(7)** | **(8)** |
|  | **17000** |  | **4500** |
| - |  | - | - |
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**3.1. B. Operational areas details proposed during 2023**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Major crops & enterprises being practiced in cluster villages** | **Prioritized problems in these crops/ enterprise** | **Extent of area (ha/No.) affected by the problem in the district** | **Names of Cluster Villages identified for intervention** | **Intervention (OFT, FLD, Training, extension activity etc.)\*** |
| 1 | Maize | Use of Old Hybrid leads to low yield | 1500 | Lawada and Chitri | OFT , training and extension activity |
| 2 | Sorghum | Low yield of sorghum due to unawareness about new variety | 15000 | Sosokheda and Lawada | FLD and training |
| 3 | Soybean | Monoculture of cv JS-335 | 50000 | Soneagaon | CFLD , Training and Extension activity |
| 4 | Bengal gram | Low yield due to less supply of nutrient | 250 | Kesharpur , Sonegaon and Lawada, Sosokheda | FLD ,OFT , training programme and Extension activities |
| 5 | Groundnut | Use of old hybrid | 2000 | Lawada | FLD ,OFT , training programme and Extension activities |
| 6 | Mandarin Orange | Low yield ,poor quality, Nutrient deficiencies | 42000 ha | Marda | Improving the quality production in Mandarin orange by utilizing balance fertilizer management, OFT,FLD, Training |
| 7 | Tomato | Low yield with Poor quality | 70ha | Dhanodi,Jasapur | Assessment on red colour varieties of onion, Training |
| 8 | Onion | Poor quality and less storage capacity | 209 ha | Baslapur | Effect of Sulphur in  a enhancement of  Onion yield, Training |
| 9 | Onion | Poor quality and less storage capacity | 150ha | Marda  Basalapur | Assessment on red  color variety of  Onion, Training ,Extension activity |
| 10 | Annual Chrysanthemum | Low yield with Poor quality | 15ha | Anjanvati | Increasing the quality production in Chrysanthemum Training |
| 11 | Gaillardia | Low yield with Poor quality | 60ha | Anjanvati, Baslapur,Jasapur | Improving the Quality and yield in Gaillardia |
| 12 | Soybean | Use of Bio fertilizers  Lack of knowledge about recommended varieties  Decrease in underground water level | 291642 ha in District (875 ha in selected area) | Kesharpur, Tq. Chikhaldara  Sosokheda  Tq. Dharni | Training & Method demonstration of Bio fertilizers  Programme on Moisture management at critical stages of the crops  Group discussions on insect & pest Soybean)  Field day on Soybean |
| 13 | Bengal am | Poor soil fertility  Decrease in underground water level  Wilt problem  Lack of seed of high yielding varieties | 88065 ha in District (650 ha in selected villages) | Sonegaon Tq. Dhamangaon  Lawada,  Sosokheda Tq. Dharni | Training on Soil test based fertilizer application  Group discussion on Improved varieties of Bengal gram  Group discussion on Introduction of pulse based cropping system  Programme on Moisture management at critical stages of the crops  Film show on Pest & Diseases on Bengal gram |
| 14 | Paddy | Weed problem  Lack of knowledge about improved variety | 8893 ha area in District  (2225 ha) | Kara  Nanduri  Sosokheda  Tq.Dharni | Awareness programme on Summer ploughing  Kisan goshti on Pre/post emergence weed management |
| 15 | Crop –Maize, gram wheat  Practiced –sowing by seeddrill (TD and BD) | Plant to plant distance is uneven spacing  More seed required and expected yield is not get | 30ha in selected cluster villages | Lawada Tq.Dharni | FLD & training on PDKV BBF planter(TD) |
| 16 | Crop- Bengal gram  Practiced - Sowing - by country plough/tifan | Required more time, labour & cost of operation for sowing  High seed rate  Low Yield | 30ha in selected cluster villages | Sosokheda Tq.Dharni | FLD & training on Three row CRIDA Planter( B D) |
| 17 | Crop-Maize  Practiced –threshing by local available multicrop thresher | Required more time, labour & cost of operation for threshing and cleaning efficiency is less | 30ha in selected cluster villages | Lawada Tq.Dharni | FLD & training on Tractor drawn multicrop thresher |
| 18 | Crop- Ground nut  Practiced - manually | High drudgery & more time required for drilling of ferilizer , hoeing and decortication | 30hain selected cluster | LawadaTq- Dharni | FLD and training on Bullock drawn single row ferti hoe |
| 19 | Crop- millets  Practiced- manually | Required more time, labour & cost of operation with extra effort for primary processing of millets | 10 ha in selected cluster villages | Nanduri ,sosokheda LawadaTq. Dharni | FLD and Training on Destoner Cum Grader cum Aspirator and other primary processing machinaries. |
| 20 | Crop- Jowar,Pigeon pea, maize  Practiced –Manually | Required more time with less output and high drudgery in operation. And burnt out the collected materials in land preparation | 30ha in selected cluster villages | Lawada Tq.Dharni | Training on Stubble collector |
| 21 | Crop-,Jowar  Practiced - in open air | It is time consuming process &required more time with less output with high drudgery | 40ha in selected cluster villages | LawadaTq- Dharni | Ttraining on Power operated Seed grader |
| 22 | Crop -Jowar Maize, paddy  Practiced-Hoeing on a single yoke with 2 labours | Required more time, labour & cost of operation for Intercultural operations. | 110 ha in selected cluster villages | Sosokheda,Lawada Tq.Dharni | Training on bullock operated twoTyne weeder |
| 23 | Pigeon pea | Pod borer complex | 60 % area i.e.67373 ha area in the district was affected (Pod borer infestation was 20-25% in the month of Non.) | Marada Tq.Tiwasa | OFT, Training, Field visits, Group discussion |
| 24 | Soybean | Leaf eating caterpillars | Most of the area is affected due to the spodoptera litura infestation in the district. | Anjanvati Tq.Tiwasa & Chitri Tq,Dharani | OFT, Training, Field visits, Group discussion |
| 25 | Soybean | Stem fly, Girdle beetle, | 52 % area i.e.149277 ha area in the district was affected  (Stem fly infestation was 15-18% in the month of August and Girdle beetle Infestation was 15-20% in the month of September.) | Sonegaon kherda Tq.Dhamangaon Rly | FLD, Training, Field visits, Group discussion, Field day |
| 26 | Mandarin | Phytophthora disease | Most of the area is affected due to the Phytophthora disease in the district. | Dhanodi Tq.Chandur Rly | FLD, Training, Field visits, Group discussion, Field day |
| 27 | Bengal gram | Pod borer infestation | About 75 % area in the district was affected | Sonegaon kherda Tq.Dhamangaon Rly | FLD, Training, Field visits, Group discussion, Field day. |
| 28 | cotton | Pink bollworm infestation | 40% area i.e.82982 ha area in the district was affected.  (In 2018-19.Pink bollworm infestations is in the month of Oct.5%,Nov.8-10%,& 25-35%Dec, ) | Sawanga Tq. Chandur Rly | FLD, Training, Field visits, Group discussion, Field day |
| 29 | Pigeon pea | Wilt disease | About 60% area in the district was affected due to wilt disease affected the yield of pigeon pea. | Marada Tq.Chandur Rly | FLD, Training, Field visits, Group discussion, Field day |
| 30 | Cattle | Non availability of green fodder  Low milk yield  Low nutritious feed and fodder. | 10250 No. | Kesherpur | Training and FLD on cultivation of Fodder crop, Group discussion on feed and fodder, green fodder production round the year |
| 31 | Cattle | Low milk yield  Major health problem  Reduce breeding efficiency  **Intermittent diarrhea** | 25320 No. | Sonegaon | Training and FLD on  Control on endo / ecto parasitic infection. Use of parasitic dial drugs and spraying in shed  Film show on different types of parasites and demonstration |
| 32 | Goat Kid | Low growth rate in kid  Low growth rate in kid  High mortality in kid | 25000 No | Sonegaon | Training and FLD on Use of probiotic supplementation in goat kid  Field day on Goat farming ,Group discussion |
| 33 | Poultry | Use of local breeds  Low weight gain  Low quality and imbalanced  Feed ,mortality | 15700 | Sosokheda | Training & FLD on  Introduction of new breeds with high eggs and meat production  Field day on Poultry farming |
| 34 | Cattle | Imbalance of feeding and lower milk yield in cow | 10750 No. | Sosokheda | Training and FLD on supplementation of cheleted mineral mixture and deworming , Group discussion |
| 35 | Calf | Calf mortality, Physical damage to skin, General body weight loss, Infectious diseases, Economic Loss, Costlier Effectiveness of treatment | 10200 | Chitri  Lawada | Training and FLD on prevention of calf mortality, Group discussion |
| 36 | Bio fortified Variety of Sweet Potato (Bhu Sona) | Women of reproductive age, pregnant women and preschool children are vulnerable to vitamin A deficiency | - | Dhuni | OFT, Training |
| 37 | Biofortified Rice | 1 Anemia among Adolescent girl in tribal area | - | Diya | OFT, Training |
| 38 | Biofortified Sorghum millet | 1 Anemia among Adolescent girl in tribal area | - | Didamda | OFT, Training |
| 39 | Oyster Mushroom | Waste of rice husk and protein deficiency in regular diet |  | Ghota, | FLD,Training |
| 40 | Soybean Mitten | Heavy Drudgery work of farm women while harvesting painful Work for farm women. | - | Chenushtha , Tq Teosa | FLD, Training |
| 41 | Insulated Fish Bags | No proper device for secured fish freshly and long time | - | Nanduri | FLD, Training |
| 42 | Cereal Puff | Creating awareness about pocessing and value addition of millets |  | Kakarmal | FLD,Training |

**3.1 c Problem cause diagram of Major Problem**

1. **PROBLEM CAUSE DIAGRAM FOR LOW YIELD IN SOYBEAN**

**Socio Economic Causes** **Bio Physical Causes**

Lack of awareness

Less Plant population

Low seed rate

Use of local seed

Poor germination

Less soil fertility

More spacing

No seed treatment

Use of Old Variety

Moisture stress at pod filling stage

Micronutrient deficiency

Lack of irrigation facility

No use of weedicides

No testing of soil samples

Incidence of pest & diseases

Lack of water conservation practices

Low credit facility

Poor status

Less availability of manures

Shortage of labour at peak period

Lack of knowledge about pest & diseases

Less use of fertilizer

Imbalance fertilizer application

Less use of manures

High weed intensity

Low yield in soybean

1. **PROBLEM CAUSE DIAGRAM FOR LOW PRODUCTIVITY IN PIGEONPEA**

**Socio Economic Causes**  **Bio Physical Causes**

Wilt

Seed treatment

Thirum

Paucity of capital

Delay in Sowing

Moisture stress

Bio fertilizer

Less no. of pods

Use of old variety

Small size of grains

Illiteracy

Low application of fertilizer

Low fertility

Indiscriminate use of chemical pesticides

Heliothis incidence

Micronutrient deficiency

Non adoption of water conservation practices

Inadequate nutrient supply

Low productivity in Pigeonpea

Unawareness

1. **PROBLEM CAUSE DIAGRAM FOR LOW PRODUCTIVITY IN CHICKPEA**

Socio Economic Causes Bio Physical Causes

Wilt

Seed treatment

Paucity of capital

Thiram

Low seed rate

Delay in Sowing

Bio fertilizer

Moisture stress

Low application of fertilizer

Unawareness

Illiteracy

Low fertility

Indiscriminate use of chemical pesticides

Use of old variety

Heliothis incidence

Small size of grains

Less no. of pods

Micronutrient deficiency

Non adoption of water conservation practices

Inadequate nutrient supply

Low productivity in Chickpea

1. **PROBLEM CAUSE DIAGRAM FOR LOW YIELD IN WHEAT**

Socio Economic Causes Bio Physical Causes

Low Yielding and Old varieties

Paucity of capital

Weed Menance

Limited Irrigation

Unseasonal Rain

Inadequate nutrient supply

Late Sowing

Inadequate use of chemical fertiliser

Delayed Harvesting of Soybean

Discoloration of Grains

Non Adoption of PP Measures fertilizer

Lack of Technical knowledge

Illiteracy

Lodging

Low productivity in Wheat

Rodents and Termites

**5. Problems cause diagram**

**LOW PRODUCTIVITY IN SOYBEAN**

**Lack of knowledge about fert.management**

**Im-**

**balance nutrient mgt**

**Less market prices**

**No use of Biofertilizers./Not followed seed treatment**

**High pest incidence like girdle beetle, stem fly & defoliators**

**Indiscriminateuse of Chemical pesticides/lack of knowledge about pest & Diseases**

**Low yield of SOYBEAN**

**Poor linkages with Extension agencies**

**No use of botanical &Boi- pesticides, No seed treatment**

**Not used IPM practices and no use of recommended plant protection measures**

**Poor soil condition**

**Less or no use of O.M./Not followed soil testing**

**Less technical Knowledge**

**Socio- economic factor Bio physical factor**

**6. Problems cause diagram**

**LOW PRODUCTIVITY IN PIGEONPEA**

**Lack of knowledge about fertilizer management**

**Im-**

**balance nutrient mgt**

**Less market prices**

**No use of Biofertilizers./Not followed seed treatment**

**Indiscriminateuse of Chemical pesticides**

**Low yield of pigeon pea**

**High pest incidence like pod borers and disease like wilt**

**No use of botanical &Boi- pesticides,**

**Unknown about IPM practices and no use of recommended plant protection measures**

**Poor linkages with Extension agencies**

**Poor soil condition**

**Less technical Knowledge**

**Less or no use of O.M.**

**Socio-economic factor Bio physical factor**

**7. Problems cause diagram**

**LOW PRODUCTIVITY IN BENGALGRAM**

**Lack of knowledge about nutrient management**

**Im-**

**balance nutrient mgt**

**Fewer market prices**

**No use of Biofertilizers/No seed treatment**

**Low yield of Bengal gram**

**Indiscriminate use of pesticides/Not use recommended measures**

**No use of botanical &**

**Boi- pesticides**

**Pest incidence of pod borers and disease like wilt**

**Poor linkages with Extension agencies**

**Unknown about IPM concept/Lack of knowledge about crucial stages of pest and diseases**

**Poor soil condition**

**Less or no use of O.M.**

**Less technical Knowledge**

**Socio- economic factor Bio physical factor**

**8. Problems cause diagram**

**LOW PRODUCTIVITY IN BT.COTTON**

**Lack of knowledge about fert.management**

**Im-**

**balance nutrient mgt**

**Less market prices**

**No use of Biofertilizers./Not followed seed treatment**

**Poor linkages with Extension agencies**

**Indiscriminate use Chemical ofpesticides for sucking pest mgt.& poor management for Pink bollworm**

**Incidence of sucking pest and Pink Bollworm**

**No use of botanical &Biopesticides**

**Boi- pesticides**

**Low yield Of Bt. Cotton**

**Less technical Knowledge**

**Unknown about IPM concept/Lack of knowledge about crucial stages of pest**

**Less or no use of O.M.**

**Poor soil condition**

**Socio- economic factor Bio physical factor**

**9. Problems cause diagram**

**LOW PRODUCTIVITY IN Mandarin**

**Lack of knowledge about nutrient management, less knowledge about micronutrient**

**Im-**

**balance nutrient mgt**

**Less market prices**

**No use of Biofertilizers /Not followed seed treatment**

**Fruit drop problem**

**Pest and disease incidence**

**Poor linkages with Extension agencies**

**Indiscriminate use of Chemical of pesticides/ use mixtures of pesticides**

**No use of botanical &Bio pesticides**

**Low yield of Brinjal**

**Less technical Knowledge**

**Lack of knowledge about pest and diseases ,crucial stages of pests**

**Poor soil condition**

**Less or no use of organic matter, improper irrigation method, No soil testing followed**

**Socio- economic factor Bio physical factor**

**3.2. Technologies to be assessed**

A.1. Abstract on the number of technologies to be assessed in respect of **crops**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Cereals** | **Oilseeds** | **Pulses** | **Commercial Crops** | **Vegetables** | **Fruits** | **Flower** | **Plantation crops** | **Tuber Crops** | **TOTAL** |
| Varietal Evaluation | 02 |  |  |  |  |  |  |  |  | 02 |
| Seed / Plant production |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management |  |  |  |  | 01 | 01 |  |  |  | 02 |
| Integrated Nutrient Management |  |  | 01 |  |  | 01 |  |  |  | 02 |
| Integrated Farming System |  |  |  |  |  |  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| Drudgery reduction |  |  |  |  |  |  |  |  |  |  |
| Farm machineries |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management |  | 02 | 01 |  |  |  |  |  |  | 03 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Resource conservation technology |  |  |  |  |  |  |  |  |  |  |
| Small Scale income generating enterprises |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **02** | **02** | **02** | **00** | **01** | **02** | **00** | **00** | **00** | **09** |

**A.2. Abstract on the number of technologies to be assessed in respect of livestock / enterprises**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic areas** | **Cattle** | **Poultry** | **Sheep** | **Goat** | **Piggery** | **Wormi culture** | **Fisheries** | **TOTAL** |
| Evaluation of Breeds |  |  |  |  |  |  |  |  |
| Nutrition Management |  |  |  |  |  |  |  |  |
| Disease of Management |  |  |  |  |  |  |  |  |
| Value Addition |  |  |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Thematic areas** | **Children** | **Tribal Women** | **Farm women** | **TOTAL** |
| Women & child care |  | 01 |  | 01 |
| Nutritional Security |  | 02 |  | 02 |
| **TOTAL** | **00** | **03** | **00** | **03** |

**B. Details of On Farm Trials/ Technology Assessment proposed during 2024**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Crop/ enterprise** | **Prioritized problem** | **Title of OFT** | **Technology options** | **Source of Technology** | **Name of critical input** | **Qty per trial** | **Cost per trial (Rs)** | **No. of trials** | **Total cost for the**  **intervention (Rs.)** | **Parameters to be studied** | **Team members** |
| 01 | Maize | Us e of Old Hybrid leads to low yield of Maize | To assess the performance of Maize hybrid PDKV Arambh for yield in kharif | Farmers Practice (T1) : Use of Pvt Hybrid (Pioneer)  Assessed Practice (T2) : use of hybrid PDKV Arambh (ABMH 18-2)  **T3 :** Use of Hybrid Phule Champion QMH -1819 | Dr. P. D. K. V, Akola 2023  MPKV Rahuri 2023 | Seed | 6-8 kg per trial | 2000 | 8 | 16000 | Plant height(cm), No.of cob/ Plant, Yield qt/ha, B:C ratio | P. N. Mendhe, |
| 02 | Chickpea | Low monitory return of Bengal gram | Application of sulphur (30 kg /ha) hrough Bento nite sulphur (35 kg /ha) in sulphur deficient soil for obtaining higher yield and higher monetory return along with recommended dose of fertilizer (25:50:30 kg ha-1 N, P2O5 & K2O) | Farmer practice (T1): Use of Recommended dose (30:60:30 kg N, P2O5 and K2O ha-1)  Assessed Practice T2 : Application of S @ 30 kg ha-1 through Bentonite sulphur (35 kg ha-1) in chickpea along with recommended dose of fertilizer (25:50:30 kg ha-1 N, P2O5 & K2O | Dr P. D. K. V, Akola 2021 | Sulphur 10 kg per trail | 10 kg per trial | 1000 per trial | 13 | 13000 | No. of pods/plant , Test weight (g) , Yield (q/ha) , GMR, NMR, B:C Ratio | P. N. Mendhe, |
| 03 | Foxtail Millets | Use of Old variety | To assess the performance of Foxtail Millets PDKV Yashshree BFTM-82)for yield in kharif | Farmer Practice (T1) : Use of Local variety  Assesed Practice T2 : use of Foxtail Variety PDKV Ysashree (BFTM-82) | Dr. P. D. K. V, Akola 2023 | Seed of Foxtail new variety PDKV Yashshree (BFTM-82) | 3 kg per trail | Rs. 450 per trail | 13 | 8000 | Plant height(cm), Yield qt/ha, GMR , NMR, B:C ratio | P. N. Mendhe |
| 4 | Mandarin Orange | Low yield and Poor quality | Assessment on Integrating Nutrient Management in Mandarin for improvement of fruit quality and yield | T1-Farmers practice-  Per plant application of F.Y.M.15-20 Kg + 225-250 gm N + 150-200 gmP2O5 +No useof K2O | - | Fertilizer | - | - | 07 | Provided  by the Farmers | No of Fruit/tree  Average wt. of the Fruit  Yield q /ha.  B:C ratio | Dr.A.P.Phuse  S.A.Pachkawade |
|  |  |  |  | T2-Technology assessed-Application of 900:300:300NPKgm/Plant in 5 splits doses  1.Stress release stage-270:120:30 NPK g/Plant  2.Pea size-270:105:30 NPK g/Plant  3.Marble size-180:75:90 NPK g/Plant  4.Egg Size-195:00:75 NPK g/Plant  5.Pre Mature-90:00:75 NPK g/Plant | Dr.PDKV .Akola  2022 | Biofertilizer and fertilizer | Soil test base | 1200 | 07 | 10000 | No of Fruit/tree  Average wt .of the Fruit  Yield q /ha.  B:C ratio | Dr.A.P.Phuse  S.A.Pachkawade |
| 5 | Mandarin Orange | Low yield and Poor quality | Assessment to control fruit drop in Mandarin Orange | T1-Farmers practice-Spraying of planofix @ 0.5 ml/ltr. Of water. |  |  |  |  |  |  |  | Dr.A.P.Phuse  S.A.Pachkawade |
|  |  |  |  | T2-Technology assessed-Spraying of GA3 @ 10ppm + urea% at flowering stage. Spraying of 2-4 D 10 ppm +urea 1% + carbendazim 1000 ppm after one month fruit setting. Spraying of 2-4 D 15ppm +carbendazim 1000ppm + 1% urea in the month of September.  Spraying of GA3 10ppmPotassium nitrate 1% in the month of October**.** |  |  |  |  |  |  |  |  |
|  |  |  |  | T3-Technology assessed-Foliar sprays of NAA (10 ppm) or GA 10 ppm or 2-4,D (15 ppm) along with N-ATCA (10  ppm )+ Brassinolide (4ppm) + Folic acid 100 ppm, in the month of July and second spray  in August is recommended for higher yield and more economic returns from mandarin  in ambia bahar. | Dr.PDKV .Akola | GA3, N-ATCA, Brassinolide & Folic acid**.** |  | 3000 | 07 | 25000 | Yield/ha q/ha, Fruits drop %, B :C Ratio |  |
| 6 | Brinjal | Low Bulb yield and Poor quality | Assessment for improving the yield and quality in Brinjal | T1-Farmers practice-0.2% DAP spray |  |  |  |  | 07 | Provided by farmer | Yield/ha q/ha, , B :C Ratio | Dr.A.P.Phuse  S.A.Pachkawade |
|  |  |  |  | T2- Technology assessed- Foliar application of Arka Vegetable special 50 gms +one lime juice +1 shampoo sachet in 10 lits of water at 15 to 20 days after transplanting and 4 spray at monthly interval with RDF 100:50:50 kg NPk/ha. | IIHR Banglore | Arka Vegetable special |  | 1000 | 07 | 7000 | Yield/ha q/ha, , B :C Ratio | Dr.A.P.Phuse  S.A.Pachkawade |
|  |  |  |  | T3- Technology assessed- Foliar application of PDKV Micrograde –II 50 mlin 10lits of Water after One month of planting and second spray 100 ml /10 lits after one month of first spray with RDF 100:50:50 kg NPk/ha | Dr.PDKV .Akola | PDKV Micrograde –II |  | 1000 | 07 | 7000 | Yield/ha q/ha, , B :C Ratio | Dr.A.P.Phuse  S.A.Pachkawade |
| 7 | Pigeon pea | Low yield due to infestation of pod borer complex | Management of pigeon pea pod borer complex | **T1- Farmers practice**  2 to 3 sprays of Profenophos @ 40 ml , Emamectin Benzoate 5 SG 10 g/10 lit water, Chlorpyriphops + Cypermethrin 30 ml per 10 lit | ---- | --- | --- | --- | 07 | --- | Per cent pod damage  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
|  |  |  |  | **T2** Spraying of Ethion 50% EC @ 20 ml in 10 L of water at 50 per cent flowering of Chickpea followed by second spraying of Chlorantraniliprole (18.5 SC) 2.5 ml in 10 L of water after 15 days | T2-DR.PDKV, AKOLA ( Joint Agresco-2019) | Ethion 50% EC  Clorantraniliprole 18.5 SC | 500 ml  60 ml | 460  780 | 07 | 3220  5460  -----------  **8680/-** | Per cent pod damage  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
|  |  |  |  | **T3 -** First spray of Chlorantraniliprole (18.5 SC) 3.25 ml + Neem oil 50 ml + Sticker 3 ml in 10 L of water (at an ETL of 0.75 larvae/plant before flowering)  Second spray of Chlorantraniliprole (18.5 SC) 3.25 ml + Neem oil 50 ml + Sticker 10 L of water 20 days after first spray (at an ETL of 0.5 larvae/plant after flowering) | T3- JAU, Junagad, (Joint Agresco-2020) | Chlorantraniliprole (18.5 SC)  Neem Oil | 60 ml  1lit | 780  400 | 07 | 5460  2800  -----------  **8260/-** | Per cent pod damage  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
| 8. | **Soybean** | Low yield due to infestation of leaf eating caterpillar, | Management of leaf defoliators in Soybean | **T1- Farmers practice**  2 or 3 chemical pesticide sprays comprising of Profenophos 40 EC + Cypermethrin 4 EC @ 30 ml or Chloropyriphos 50EC 30ml or Clorantraniliprole 18.5 SC 2 ml per 10 lit water | -- | -- | -- | -- | 07 | -- | No. of larvae/MRL  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
|  |  |  |  | T2 - 1st spray - Spinetoram 11.70 SC @ 9 ml per 10 lit water at ETL  2nd spray- Emamectin benzoate 1.9 EC @8.5 ml per 10 lit water 15 days after 1st spray | T2- AAU, Joint Agresco 2023 | Spinetoram 11.70 SC  Emamectin benzoate 1.9 EC | 180 ml  170 ml | 2150  500 | 07 | 15050  3500  **18550/-** | No. of larvae/MRL  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
|  |  |  |  | T3 - Four sprays of Neem Seed extract @ 5% starting at 20 days of crop emergence with subsequent sprays at 10 days interval | Dr. PDKV, Akola, Joint Agresco 2020 | Neem seed powder | 20 kg | 60 | 07 | 1200 | No. of larvae/MRL  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
| 9 | Soybean | Low yield due to infestation of stem fly | Management of Soybean Stem Fly | **T1- Farmers practice**  No seed treatment or seed treatment with 2 to 3 ml Thiamethoxam 30 FS per kg seed, Spraying of Profenophos 40%+Cypermethrin 4% or Chlorpyriphos 20EC | -- | -- | -- | -- | 13 |  | Per cent stem fly incidence  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
|  |  |  |  | T2 - seed treatment by mixing polykote polymer 4ml @ 4ml water with Thiamethaxon 30FS 10ml per kg seed and then it is recommended to spray Chlorantroniliprole 18.5% SC @ 3 ml in 10 liters of water after 45 days of sowing | Per cent stem fly incidence  Average yield (kg/ha),  B:C Ratio | polykote polymer  Thiamethaxon 30FS  Chlorantroniliprole 18.5% SC | 120 ml  300 ml  60 ml | 100  700  780 | 13 | 1300  9100  10140 | Per cent stem fly incidence  Average yield (kg/ha),  B:C Ratio | SMS(Plant Protection**)** SMS (Agril.Extn)  SMS (Agronomy) |
| 10 | Biofortified Rice | underniurishment of women & Adolocent girl in rural area due to lack of iron | Assess of Red Rice in daily consumption to overcome the Anemia for the Adolocent girl | Biofortified Rice | P.D.K.V., Akola &NAU ,Navsari | Biofortified Rice | Single | 900 | 05 | 9000 | Pre & Post HB level |  |
| 11 | Biofortified Pearl Millet | Malnutrition and deficiency of iron | To study the efficiency of iron rich food for family | Biofortified  Parl Millet (Parbhani shakti) | MPKV,  ,Rahuri | Biofortified Pearl Millet (Parbhani shakti) | - | 700 | 05 | 7000 | Consumption  Pre & Post HB level |  |
| 12 | Bio fortified Variety of Sweet Potato (Bhu Sona) | Women of reproductive age, pregnant women and preschool children are vulnerable to vitamin A deficiency | To access the New Bio fortified Variety of Sweet Potato (Bhu Sona & Bhui Krishna) | Bio fortified Variety of Sweet Potato (Bhu Sona) | Central Tuber Croups Research Institute , Thiruvananthapuram | Bio fortified Variety of Sweet Potato (Bhu Sona & Bhui Krishna) |  | 500 | 05 | 5000 | Yield & Consumption |  |

**3.3. Frontline Demonstrations**

A. Details of FLDs to be organized (Oilseeeds, pulses, cereals, cotton, commercial crops, horticulture crops, vegetables, spices and condiments, fodder crops, etc)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Crop** | **Variety** | **Thematic area** | **Technology for demonstration** | **Critical inputs with cost (Rs.)** | **Season and year** | **Area (ha)** | **No. of farmers/**  **demon.** | **Parameters identified** |
| 1 | Sorghum | PDKV Kalyani (AKSV-181) | Varietal Evaluation | Demonstration on new variety of Sorghum | 5000.00 | Kharif 2024 | 5.2 | 13 | Plant height, , Grain yield, GMR, NMR, B:C ratio |
| 2. | Chickpea | Vijay | Integrated crop management | Foliar application of 15 ppm GA3 [8.3 g GA3 (90% a.i.) / ha in 500 litres of water)] at flowering and pod development stages | 2000.00 | Rabi 2024 | **5.2** | 13 | Plant height, Number of pods plant-1, Grain yield, GMR, NMR, B:C ratio. |
| 3. | Onion | Akola Safed | Varietal evaluation | Increasing the yield and shelf life in onion | Seed  20000/- | Rabi 2024 | 04ha | 15 | Size of the Bulb and luster of the Bulb , Yield q /ha.  B:C ratio |
| 4. | Tomato | Arka abhed | Varietal evaluation | Increasing the yield and quality | Seed  10000/- | Rabi 2024 | 04ha | 15 | Yield q /ha.  B:C ratio |
| 5 | Onion | Akola Safed | Seed multiplication | 10 t FYM + 150:50:50 NPK kg/ha) along with foliar application of borax (0.2 %) at flower opening stage **)** | Borax spray | Rabi 2024 | 04ha | 15 | Yield q /ha.  B:C ratio |
| 6 | Garden Pea | Arka Ajit | Varietal evaluation | Increasing the Yield | Seed  4000 | Rabi 2024 | 02ha | 15 | Yield q /ha.  B:C ratio |
| 7 | Mandarin | Nagpur mandarin | IDM | **Management of Phytophthora root rot /gummosis of mandarin** - Application of Bordeaux paste (1:1:10) on tree trunk as pre and post monsoon  2 sprays of Potassium Phosphonate 3 ml/liter water (pre and post monsoon | Bordeaux paste  Potassium Phosphonate  **Total Cost-Rs. 25000/-** | Kharif-2024 | 04 | 20 | % Disease intensity of gummosis (Scale 0-4)  Average yield (kg/ha)  B:C Ratio |
| 8 | Pigeon pea | BDN 716 | IPM | **Management of pigeon pea pod borer complex -**1st spray - Indoxacarb 14.5 SC @ 7ml per 10 lit water at 50 per cent flowering  2nd spray- Chlorantraniliprole 18.5 SC 3 ml in 10 L of water after 15 days interval of first spray | Indoxacarb 14.5 SC Chlorantraniliprole 18.5 SC  **Total Cost-Rs. 24000/-** | Rabi 2024 | 08 | 20 | No. of Larvae/MRL  Per cent pod damage at harvest  Yield; B:C ratio |
| 09 | Cotton | Ajit 155 | IPM | **Management of Pink bollworm in Bt cotton-**  1st Spray profenophos 50 EC @ 20 ml per 10 lit water at 60 DAS  2nd Spray Emamectin benzoate 5 SG @ 4.4 g per 10 lit water at 80 DAS and  3rd spray Lambda cyhalothrin 5 EC @ 10 ml per 10 lit water at 100 DAS | profenophos 50 EC, Emamectin benzoate 5 SG, Lambda cyhalothrin 5 EC  Total Cost-Rs. 16000/- | Kharif-2024 | 8 ha | 20 | 1. Per cent Green boll damage  2.Per cent loculidamage at harvest  3. Average Yield (kg/ha)  4. B: C Ratio |
| 10 | Pigeon pea | BSMR736/PKV TARA | IDM | **Management of Wilt disease in Pigeon pea-**  Seed treatment with combined product of fungicide Carboxin (37.5 %) + Thiram (37.5 %) @ 3g/kg fallowed by *Trichodermaviride*[*@*10](mailto:@10g)g/kg of seed | Carboxin (37.5 %) + Thiram (37.5 %),*Trichodermaviride.*  Total Cost-Rs. 5000/- | Kharif-2024 | 10 ha | 25 | % Disease incidence  Yield (q/ha)  C: B Ratio |

**Sponsored Demonstrations (CFLDs on O & P/Others)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Crop** | **Variety** | **Season and Year** | **Area (ha)** | **No. of farmers** |
| 01 | Soybean | PDKV –Amba | Kharif 2024 | 20 | 50 |
| 02 | Groundnut | TAG-73 | Summer 2024 | 10 | 25 |
|  |  |  | **Total** | **30** | **75** |

**B. Extension and Training activities under FLDs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Activity** | **No. of activities** | **Month** | **Number of participants** |
| 1 | Field days | 12 | Every Month | 1000 |
| 2 | Farmers , Rural Youth Training | 40 | Every Month | 1500 |
| 3 | Media coverage | 70 | Every Month | -- |
| 4 | Training for extension functionaries | 15 | Every Month | 600 |

**C. Details of FLD on Enterprises**

**a. Farm Implements**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name of the implement** | **Crop** | **Season and year** | **No. of farmers** | **Area (ha)** | **Critical inputs** | **Performance parameters /**  **indicators** |
|
| Bullock drawn Single row ferti hoe | Ground nut | Summer 2024 | 10 | 10 | Bullock drawn Single row ferti hoe | Field capacity (ha/hr)  Labour required (man hr/ ha)  Time req. (hr/ha).  Cost of operation (Rs/ha) |
| Destoner cum grader cum aspirator | Sawa ( millets) | Kharif 2024 | 15 | 05 | Destoner cum grader cum aspirator | Output capacity (qt/hr)  Time required hr/qt  Cost of operation (Rs/qt)  Cleaning efficiency  Saving obtained in Cost of operation% |
| Tractor operated Multi crop thresher | Maize | Kharif 2024 | 15 | 10 | Tractor operated Multi crop thresher(5 hp) | Output capacity(qt/hr)  Time req. (hr/qt).  Cost of operation (Rs/ qt)  Threshing efficiency % |
| PDKV BBF Planter | Bengalgram | Rabi 2024 | 15 | 10 | PDKV BBF Planter | Field capacity (ha/hr)  Soil moisture content % at 45 DAS  Plant to Plant distance (cm)  Cost of operation (Rs/ha)  Yield( qt/ha) |
| Three row CRIDA planter( BD) | Bengal gram | Rabi 2024 | 20 | 10 | Three row CRIDA planter( BD) | Field capacity (ha/hr)  Labour required (man hr/ ha)  Time req. (hr/ha).  Cost of operation (Rs/ ha)  Plant to Plant distance (cm)  Yield (qt/ha) |

**b. Livestock and Fisheries Enterprises**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Enterprise** | **Breed** | **No. of farmers** | **No. of animals, poultry birds etc.** | **Critical inputs** | **Performance parameters /**  **indicators** |
|
| Poultry | Kaveri | 20 | 500  chicks | 25 grower bird + Medicine (Liq Vimeral+Liv-52+ Pow Laxin +Liq Groviplex) and Vaccine (Lasota) | Av Eggs Production ,  Mortality |
| Cattle | Non descript | 20 | 20 | Supply of Sampurna fodder Slits  ( 500 slit per Farmer) | Av. Milk Yield,  Green fodder yield,  C : B Ratio |
| Goat kid | Non descript | 20 | 40 | Pow. Probiotic (Pow. Bio-YC-gold)  Dose – 4 gm / kid for 90 days | Av. Weight Gain,  Mortality, Health Status  C : B Ratio |
| Cattle | Non descript | 20 | 20 | Liq. Cypermethrin 50 ml for 3 times spry in cattle shed+ Tab Antihelmentic  3000 mg single dose | Av .Milk yield,  Health Status,  C : B Ratio |
| Cattle | Non descript | 20 | 20 | Cheleted Mineral Mixture 30 gm / day /animal for 30 days+ Tab Anthelminic 3000 mg single dose | Av .Milk yield,  Health Status,  C : B Ratio |
| Calf | Non descript | 20 | 20 | Aureomycin nutritional formula  10 ml / calf 1 &2 day.  Liq Piprazine adipate 10 ml / calf + Tab Sulphadimidine 500 mg 3 to 7 days +Liq Sulmet 30 ml 8th day, 30 ml on 9 day, 15 ml on 10 day and 15 ml on 11th day | Mortality ,  Body weight gain |

**c. Other Enterprises (Mushroom, Apiculture, Sericulture, Vermicompst, Value Addition, Women empowerment, etc)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Enterprise** | **Technology demonstrated** | **No. of farmers** | **No. of units** | **Critical inputs** | **Performance parameters /**  **indicators** |
|
| Soybean Mitten | Brinjal & Soybean Mitten | 20 | 20 | Brinjal & Soybean Mitten | Time required, overall Discomfort |
| Oyster Mushroom | Oyster Mushroom | 25 | 25 | Spown of Oyster Mushroom | Yield/ BAG  Harvesting Period |
| Cereal Puff | Puff And Flex | 20 | 20 | Corn and surgum | Percentage of puffing and qualities |
| Insulated Fish Bags | Insulated Fish Bags | 10 | 10 | Insulated Fish Bags | Shelf Life of Fish/Hr  Market Rate |

**3.4. Training (Including the sponsored and FLD training programmes):**

**A. ON Campus**

| **Thematic Area** | **No. of Courses** | **No. of Participants** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Others** | | | **SC/ST** | | | **Grand Total** |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **(A) Farmers & Farm Women** | | | | | | | | |
| **I Crop Production** | | | | | | | | |
| Integrated Crop Management | 03 | 250 | 85 | 335 | 79 | 36 | 115 | 335 |
| **II Horticulture** | | | | | | | | |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |
| Nursery raising | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Protective cultivation (Green Houses, Shade Net etc.) | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **b) Fruits** |  |  |  |  |  |  |  |  |
| Cultivation of Fruit | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Plant propagation techniques | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |
| Nursery Management | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **III Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 01 | 25 | 05 | 30 | 02 | 01 | 30 | 30 |
| Soil health management | 01 | 50 | 25 | 75 | 20 | 10 | 30 | 75 |
| Soil and Water conservation practices | 01 | 25 | 05 | 30 | 05 | 02 | 7 | 30 |
| **IV Livestock Production and Management** | | | | | | | | |
| Dairy Management | 1 | 20 | 2 | 22 | 6 | 2 | 8 | 30 |
| Poultry Management | 1 | 10 | 5 | 15 | 5 | 2 | 7 | 22 |
| Disease Management | 1 | 15 | 5 | 20 | 2 | 3 | 5 | 25 |
| Fodder production | 1 | 15 | 5 | 20 | 4 | 2 | 6 | 26 |
| **V Home Science/Women empowerment** | | | | | | | | |
| Value addition | 01 | 05 | 15 | 20 | 00 | 05 | 05 | 25 |
| Income generation activities for empowerment of rural Women | 01 | 05 | 15 | 20 | 00 | 05 | 05 | 25 |
| Location specific drudgery reduction technologies | 01 | 05 | 15 | 20 | 00 | 05 | 05 | 25 |
| **VI Agril. Engineering** |  |  |  |  |  |  |  |  |
| Small scale processing and value addition | 1 | 5 | 5 | 10 | 5 | 15 | 20 | 30 |
| Small scale processing and value addition |  |  |  |  |  |  |  |  |
| **VII Plant Protection** |  |  |  |  |  |  |  |  |
| Integrated Disease Management | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| Bio-control of pests and diseases | 02 | 28 | 06 | 34 | 12 | 04 | 16 | 50 |
| **X Capacity Building and Group Dynamics** |  |  |  |  |  |  |  |  |
| Group dynamics | 01 | 09 | 0 | 09 | 01 | 0 | 01 | 10 |
| Natural farming | 02 | 30 | 20 | 50 | 08 | 02 | 10 | 60 |
| Entrepreneurial development of farmers | 01 | 04 | 01 | 05 | 20 | 5 | 25 | 30 |
| **(B) RURAL YOUTH** |  |  |  |  |  |  |  |  |
| Organic input production | 02 | 50 | 10 | 60 | 20 | 04 | 24 | 60 |
| Planting material production | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Protected cultivation of vegetable crops | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Commercial fruit production | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Nursery Management of Horticulture crops | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Employment opportunities in agriculture for rural youth | 01 | 25 | 20 | 45 | 04 | 01 | 05 | 55 |
| Packing and marketing of millets | 01 | 04 | 01 | 05 | 20 | 5 | 25 | 30 |
| Vermi-culture Production & Marketing | 01 | 20 | 05 | 25 | 04 | 01 | 05 | 30 |
| Bio-agents production | 01 | 05 | 00 | 05 | 19 | 01 | 20 | 25 |
| Repair and maintenance of farm machinery and implements | 01 | 15 | 0 | 15 | 5 | 5 | 10 | 25 |
| Small scale processing | 01 | 15 | 5 | 20 | 5 | 0 | 5 | 25 |
| Production of organic inputs | 01 | 15 | 02 | 17 | 05 | 03 | 08 | 25 |
| Vermi-culture | 01 | 15 | 02 | 17 | 05 | 03 | 08 | 25 |
| Sheep and goat rearing | 01 | 15 | 5 | 20 | 4 | 1 | 5 | 25 |
| Quail farming | 01 | 15 | 5 | 20 | 4 | 1 | 5 | 25 |
| **(C) Extension Personnel** |  |  |  |  |  |  |  |  |
| Integrated Nutrient management | 01 | 25 | 05 | 30 | 10 | 05 | 15 | 30 |
| Integrated crop Management | 02 | 50 | 10 | 60 | 20 | 10 | 30 | 60 |
| Integrated Nutrient management | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Protected cultivation technology | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Group Dynamics and farmers organization | 01 | 15 | 02 | 17 | 02 | 01 | 03 | 20 |
| Natural farming | 02 | 30 | 20 | 50 | 08 | 02 | 10 | 60 |
| Improved implements for organic farming | 1 | 20 | 10 | 30 | 5 | 5 | 10 | 40 |
| Integrated Pest Management | 02 | 28 | 6 | 34 | 12 | 4 | 16 | 50 |
| Production of organic inputs | 01 | 15 | 02 | 17 | 6 | 2 | 8 | 25 |

**B. OFF Campus**

| **Thematic Area** | **No. of Courses** | | **No. of Participants** | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Others** | | | | | | **SC/ST** | | | | | | | | | | **Grand Total** | |
| Male | Female | | | Total | Male | | Female | | | Total | | | | |  | |
| **(A) Farmers & Farm Women** | | | | | | | | | | | | | | | | | | | | |
| **I Crop Production** | | | | | | | | | | | | | | | | | | | | |
| Integrated Crop Management | 04 | | 225 | 50 | | | 275 | 201 | | 38 | | | 239 | | | | | 275 | |
| Fodder production | 1 | | 5 | 5 | | | 10 | 10 | | 5 | | | 15 | | | | | 25 | |
| **II Horticulture** | | | | | | | | | | | | | | | | | | | | |
| **a) Vegetable Crops** |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| Off-season vegetables | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| **b) Fruits** |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| Training and Pruning | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| Cultivation of Fruit | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| Management of young plants/orchards | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| Rejuvenation of old orchards | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| **e) Tuber crops** |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| Production and Management technology | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| **f) Spices** |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| Production and Management technology | 01 | 15 | | 05 | | | 20 | 03 | | 02 | | | 05 | | | | | 25 | |
| **III Soil Health and Fertility Management** |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| Soil and Water Testing | 02 | 45 | | 10 | | | 55 | 28 | | 5 | | | 33 | | | | | 55 | |
| Integrated Nutrient Management |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| Soil and Water Testing |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| **IV Livestock Production and Management** | | | | | | | | | | | | | | | | | | | | |
| Dairy Management | **1** | 15 | | 5 | | | 20 | 2 | | 1 | | | 3 | | | | | 23 | |
| Poultry Management | **2** | 35 | | 10 | | | 45 | 5 | | 4 | | | 9 | | | | | 54 | |
| Disease Management | **1** | 4 | | 2 | | | 6 | 15 | | 4 | | | 19 | | | | | 25 | |
| Feed management | 1 | 10 | | 05 | | | 15 | 10 | | 05 | | | 15 | | | | | 30 | |
| Feed management |  |  | |  | | |  |  | |  | | |  | | | | |  | |
| **V Home Science/Women empowerment** | | | | | | | | | | | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 01 | 00 | | 05 | 05 | | | 05 | | | 15 | | | 20 | | 25 | | | |
| Design and development of low/minimum cost diet | 01 | 00 | | 00 | 00 | | | 05 | | | 15 | | | 20 | | 20 | | | |
| Designing and development for high nutrient efficiency diet | 01 | 00 | | 00 | 00 | | | 05 | | | 15 | | | 20 | | 20 | | | |
| Minimization of nutrient loss in processing | 01 | 00 | | 00 | 00 | | | 05 | | | 15 | | | 20 | | 20 | | | |
| Storage loss minimization techniques | 03 | 00 | | 05 | 05 | | | 05 | | | 30 | | | 35 | | 40 | | | |
| Income generation activities for empowerment of rural Women | 02 | 10 | | 10 | 20 | | | 00 | | | 15 | | | 15 | | 25 | | | |
| Location specific drudgery reduction technologies | 03 | 00 | | 00 | 00 | | | 05 | | | 30 | | | 35 | | 35 | | | |
| Women and child care | 02 | 00 | | 00 | 00 | | | 10 | | | 30 | | | 40 | | 40 | | | |
| **VI Agril. Engineering** |  |  | |  |  | | |  | | |  | | |  | |  | | | |
| Installation and maintenance of micro irrigation systems | 2 | 30 | | 0 | 30 | | | 10 | | | 10 | | | 20 | | 50 | | | |
| Repair and maintenance of farm machinery and implements | 4 | 20 | | 0 | 20 | | | 45 | | | 35 | | | 80 | | 100 | | | |
| Small scale processing and value addition | 1 | 05 | | 0 | 05 | | | 15 | | | 0 | | | 15 | | 20 | | | |
| Post Harvest Technology | 2 | 20 | | 0 | 20 | | | 20 | | | 0 | | | 20 | | 40 | | | |
| **VII Plant Protection** |  |  | |  |  | | |  | | |  | | |  | |  | | | |
| Integrated Pest Management | 12 | 168 | | 36 | 204 | | | 72 | | | 24 | | | 96 | | 300 | | | |
| Integrated Disease Management | 02 | 28 | | 06 | 34 | | | 12 | | | 4 | | | 16 | | 50 | | | |
| **X Capacity Building and Group Dynamics** |  |  | |  |  | | |  | | |  | | |  | |  | | | |
| Natural farming | 03 | 45 | | 03 | 48 | | | 25 | | | 10 | | | 35 | | 83 | | | |
| Entrepreneurial development of farmers/youths | 01 | 04 | | 01 | 05 | | | 14 | | | 01 | | | 15 | | 20 | | | |
| Group formation for millets production | 01 | 04 | | 01 | 05 | | | 14 | | | 01 | | | 15 | | 20 | | | |
| Marketing of Agriculture inputs | 01 | 10 | | 00 | 10 | | | 10 | | | 10 | | | 20 | | 30 | | | |
| **(B) RURAL YOUTH** |  |  | |  | |  | | |  | | |  | | |  | |  | | | |
| Seed Production | 01 | 25 | | 05 | | 30 | | | 10 | | | 02 | | | 12 | | 30 | | | |
| Integrated crop Management | 01 | 25 | | 05 | | 30 | | | 22 | | | 03 | | | 25 | | 30 | | | |
| Production of organic inputs | 01 | 15 | | 02 | | 17 | | | 05 | | | 03 | | | 08 | | 25 | | | |
| Dairying | 1 | 16 | | 04 | | 20 | | | 4 | | | 1 | | | 05 | | 25 | | | |
| Sheep and goat rearing | 2 | 38 | | 07 | | 45 | | | 6 | | | 3 | | | 9 | | 54 | | | |
| Disease Management | 2 | 40 | | 07 | | 47 | | | 5 | | | 03 | | | 08 | | 55 | | | |
| Poultry production | 1 | 20 | | 04 | | 24 | | | 3 | | | 1 | | | 4 | | 28 | | | |

**C. Consolidated table (ON and OFF Campus)**

| **Thematic Area** | **No. of Courses** | **No. of Participants** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Others** | | | **SC/ST** | | | **Grand Total** |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **(A) Farmers & Farm Women** | | | | | | | | |
| **I Crop Production** | | | | | | | | |
| Integrated Crop Management | 7 | 475 | 135 | 610 | 280 | 74 | 354 | 610 |
| Fodder production |  |  |  |  |  |  |  |  |
| Fodder production |  |  |  |  |  |  |  |  |
| **II Horticulture** | | | | | | | | |
| **a) Vegetable Crops** |  |  |  |  |  |  |  |  |
| Off-season vegetables | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Nursery raising | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Protective cultivation (Green Houses, Shade Net etc.) | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **b) Fruits** |  |  |  |  |  |  |  |  |
| Training and Pruning | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Cultivation of Fruit | 02 | 30 | 10 | 40 | 06 | 04 | 10 | 50 |
| Management of young plants/orchards | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Rejuvenation of old orchards | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Plant propagation techniques | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **c) Ornamental Plants** |  |  |  |  |  |  |  |  |
| Nursery Management | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **e) Tuber crops** |  |  |  |  |  |  |  |  |
| Production and Management technology | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **f) Spices** |  |  |  |  |  |  |  |  |
| Production and Management technology | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **III Soil Health and Fertility Management** |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management | 01 | 25 | 05 | 30 | 02 | 01 | 30 | 30 |
| Soil health management | 01 | 50 | 25 | 75 | 20 | 10 | 30 | 75 |
| Soil and Water conservation practices | 01 | 25 | 05 | 30 | 05 | 02 | 7 | 30 |
| Soil and Water Testing | 02 | 45 | 10 | 55 | 28 | 5 | 33 | 55 |
| Others (Organic farming) |  |  |  |  |  |  |  |  |
| **IV Livestock Production and Management** |  |  |  |  |  |  |  |  |
| Fodder production | 2 | 20 | 10 | 30 | 14 | 07 | 21 | 51 |
| Dairy Management | 2 | 35 | 07 | 42 | 8 | 3 | 11 | 53 |
| Poultry Management | 3 | 45 | 15 | 60 | 10 | 06 | 16 | 76 |
| Disease Management | 2 | 19 | 07 | 26 | 17 | 07 | 24 | 50 |
| Feed management | 1 | 10 | 05 | 15 | 10 | 05 | 15 | 30 |
| **V Home Science/Women empowerment** |  |  |  |  |  |  |  |  |
| Household food security by kitchen gardening and nutrition gardening | 01 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| Design and development of low/minimum cost diet | 01 | 00 | 00 | 00 | 05 | 15 | 20 | 20 |
| Designing and development for high nutrient efficiency diet | 01 | 00 | 00 | 00 | 05 | 15 | 20 | 20 |
| Minimization of nutrient loss in processing | 01 | 00 | 00 | 00 | 05 | 15 | 20 | 20 |
| Storage loss minimization techniques | 03 | 00 | 05 | 05 | 05 | 30 | 35 | 40 |
| Value addition | 01 | 05 | 15 | 20 | 00 | 05 | 05 | 25 |
| Income generation activities for empowerment of rural Women | 01 | 05 | 15 | 20 | 00 | 05 | 05 | 25 |
| Location specific drudgery reduction technologies | 04 | 05 | 15 | 20 | 00 | 10 | 40 | 60 |
| Women and child care | 02 | 00 | 00 | 00 | 10 | 30 | 40 | 40 |
| **VI Agril. Engineering** |  |  |  |  |  |  |  |  |
| Installation and maintenance of micro irrigation systems | 2 | 30 | 0 | 30 | 10 | 10 | 20 | 50 |
| Repair and maintenance of farm machinery and implements | 4 | 20 | 0 | 20 | 45 | 35 | 80 | 100 |
| Small scale processing and value addition | 2 | 10 | 5 | 15 | 20 | 15 | 35 | 50 |
| Post Harvest Technology | 2 | 20 | 0 | 20 | 20 | 0 | 20 | 40 |
| **VII Plant Protection** |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 12 | 168 | 36 | 204 | 72 | 24 | 96 | 300 |
| Integrated Disease Management | 03 | 42 | 09 | 51 | 18 | 06 | 24 | 75 |
| Bio-control of pests and diseases | 02 | 28 | 06 | 34 | 12 | 04 | 16 | 50 |
| **X Capacity Building and Group Dynamics** |  |  |  |  |  |  |  |  |
| Group dynamics | 02 | 08 | 02 | 10 | 25 | 05 | 30 | 40 |
| Natural farming | 05 | 75 | 23 | 98 | 33 | 12 | 45 | 143 |
| Entrepreneurial development of farmers | 01 | 10 | 00 | 10 | 10 | 05 | 15 | 25 |
| Mobilization of social capital | 01 | 09 | 01 | 10 | 09 | 01 | 10 | 20 |
| Entrepreneurial development of farmers/youths | 02 | 08 | 02 | 10 | 25 | 05 | 30 | 40 |
| Group formation for millets production | 02 | 08 | 02 | 10 | 25 | 05 | 30 | 40 |
| Marketing of Agriculture inputs | 01 | 10 | 00 | 10 | 10 | 05 | 15 | 25 |
| **(B) RURAL YOUTH** |  |  |  |  |  |  |  |  |
| Organic input production | 02 | 50 | 10 | 60 | 20 | 04 | 24 | 60 |
| Seed Production | 01 | 25 | 05 | 30 | 10 | 02 | 12 | 30 |
| Integrated crop Management | 01 | 25 | 05 | 30 | 22 | 03 | 25 | 30 |
| Planting material production | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Protected cultivation of vegetable crops | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Commercial fruit production | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Nursery Management of Horticulture crops | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Employment opportunities in agriculture for rural youth | 01 | 25 | 20 | 45 | 04 | 01 | 05 | 50 |
| Packing and marketing of millets | 01 | 04 | 01 | 05 | 20 | 5 | 25 | 30 |
| Vermi-culture Production & Marketing | 01 | 20 | 05 | 25 | 04 | 01 | 05 | 30 |
| Bio-agents production | 01 | 05 | 00 | 05 | 19 | 01 | 20 | 25 |
| Repair and maintenance of farm machinery and implements | 1 | 15 | 0 | 15 | 5 | 5 | 10 | 25 |
| Small scale processing | 1 | 15 | 5 | 20 | 5 | 0 | 5 | 25 |
| Vermi-culture | 01 | 15 | 02 | 17 | 05 | 03 | 08 | 25 |
| Production of organic inputs | 02 | 30 | 4 | 34 | 11 | 5 | 16 | 50 |
| Dairying | 1 | 16 | 04 | 20 | 4 | 1 | 05 | 25 |
| Sheep and goat rearing | 3 | 53 | 12 | 65 | 10 | 4 | 14 | 79 |
| Quail farming | 1 | 15 | 5 | 20 | 4 | 1 | 5 | 25 |
| Disease Management | 2 | 40 | 07 | 47 | 5 | 03 | 08 | 55 |
| Poultry production | 1 | 20 | 04 | 24 | 3 | 1 | 4 | 28 |
| Post Harvest Technology | 01 | 00 | 05 | 05 | 00 | 20 | 20 | 25 |
| Tailoring and Stitching | 01 | 00 | 15 | 15 | 00 | 10 | 10 | 25 |
| **(C) Extension Personnel** |  |  |  |  |  |  |  |  |
| Integrated Nutrient management | 01 | 25 | 05 | 30 | 10 | 05 | 15 | 30 |
| Integrated crop Management | 02 | 50 | 10 | 60 | 20 | 10 | 30 | 60 |
| Integrated Nutrient management | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Protected cultivation technology | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Group Dynamics and farmers organization | 01 | 15 | 02 | 17 | 02 | 01 | 03 | 20 |
| Natural farming | 02 | 30 | 20 | 50 | 08 | 02 | 10 | 60 |
| Care and maintenance of farm machinery and implements | 1 | 20 | 10 | 30 | 5 | 5 | 10 | 40 |
| Integrated Pest Management | 02 | 28 | 6 | 34 | 12 | 4 | 16 | 50 |
| Production of organic inputs | 01 | 14 | 3 | 17 | 6 | 2 | 8 | 25 |
| Household food security | 01 | 10 | 10 | 20 | 00 | 15 | 15 | 35 |

**3.5. Extension Activities (including activities of FLD programmes)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Nature of Extension Activity** | **No. of activities** | **Farmers** | | | **Extension Officials** | | | **Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Advisory Services | 52 | 950 | 190 | 1140 | 47 | 15 | 62 | 997 | 205 | 1902 |
| Agri mobile clinic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Animal Health Camp | 4 | 100 | 30 | 130 | 10 | 5 | 15 | 110 | 35 | 145 |
| Celebration of important days | 6 | 70 | 165 | 235 | 4 | 5 | 9 | 74 | 95 | 169 |
| Diagnostic visits | 42 | 420 | 80 | 500 | 19 | 4 | 23 | 439 | 84 | 573 |
| Exhibition | 3 | 400 | 100 | 500 | 20 | 10 | 30 | 420 | 110 | 530 |
| Exposure visits | 3 | 42 | 5 | 47 | 5 | 0 | 5 | 47 | 5 | 52 |
| Extension Literature | 24 | 350 | 100 | 450 | 25 | 25 | 50 | 375 | 125 | 1500 |
| Ex-trainees Sammelan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farm Science Club Conveners meet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farmers Seminars | 1 | 50 | 10 | 60 | 4 | 1 | 5 | 54 | 11 | 65 |
| Farmers visit to KVK | 151 | 695 | 175 | 870 | 39 | 14 | 53 | 734 | 189 | 1023 |
| Field Day | 14 | 463 | 114 | 577 | 22 | 7 | 29 | 485 | 121 | 606 |
| Film Show | 14 | 270 | 100 | 370 | 9 | 4 | 13 | 279 | 104 | 383 |
| Group meetings | 32 | 465 | 100 | 565 | 24 | 4 | 28 | 489 | 104 | 593 |
| Jalshakti Abhiyan | 5 | 50 | 20 | 70 | 5 | 1 | 6 | 55 | 21 | 76 |
| KisanGoshthi | 28 | 391 | 117 | 508 | 19 | 6 | 25 | 410 | 123 | 533 |
| KisanMela | 2 | 350 | 100 | 450 | 7 | 5 | 12 | 357 | 105 | 462 |
| Krishi Din Programme | 1 | 27 | 0 | 27 | 3 | 2800 | 3 | 30 | 0 | 30 |
| Lectures delivered as resource persons | 40 | 786 | 160 | 946 | 34 | 17 | 51 | 820 | 177 | 997 |
| Method demonstration on Bio fertilizer & seed treatment | 2 | 37 | 10 | 47 | 1 | 1 | 2 | 38 | 12 | 50 |
| Newspaper coverage | 46 |  |  |  |  |  |  |  |  |  |
| Popular articles | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1000 |
| Pre Rabi Kisan Mela | 1 | 350 | 50 | 400 | 7 | 3 | 10 | 357 | 53 | 410 |
| Radio talks | 2 |  |  |  |  |  |  |  |  |  |
| Scientific visit to farmers field | 94 | 720 | 180 | 900 | 39 | 15 | 52 | 759 | 195 | 1054 |
| Soil health Camp | 2 | 100 | 20 | 120 | 2 | 0 | 2 | 102 | 20 | 122 |
| Soil test campaigns | 2 | 50 | 20 | 70 | 2 | 0 | 2 | 52 | 20 | 72 |
| Swachatta Hi Seva Programme | 10 | 100 | 50 | 150 | 10 | 3 | 13 | 110 | 53 | 163 |
| TV talks | 3 |  |  |  |  |  |  |  |  |  |
| Workshop on natural farming | 1 | 50 | 10 | 60 | 4 | 1 | 5 | 54 | 11 | 65 |
| World soil health day | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 30 | 0 | 30 |
| Workshop | 1 |  |  |  |  |  |  |  |  |  |
| Any Other (Specify) Method demonstration | 3 | 40 | 20 | 60 | 3 | 2 | 5 | 43 | 22 | 65 |

**3.6. Target for Production and supply of Technological products**

**SEED MATERIALS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Crop** | **Variety** | **Quantity (qtl.)** |
|
| **MILLETS** | Sorghum | PDKV Kalyani | 0.52 |
|  | Foxtail Millets | PDKV Yashshree | 0.39 |
|  |  |  |  |
| **Cereals** | Maize | PDKV Aarambha and Phule Champion QMH -1819 | 0.78 |
|  | Wheat | PDKV Sardar | 10 |
| **OILSEEDS** | Soybean | PDKV Amba | 20.00 |
|  |  | Phule Durva | 20 |
|  |  | Phule kimaya | 20 |
|  |  | Phule sangam | 20 |
|  | Ground nut | TAG-73 | 5.00 |
| **PULSES** | Bengal gram | PDKV Kanak | 10 |
|  |  |  |  |
| **VEGETABLES** |  |  |  |
| **OTHERS (Specify)** |  |  |  |
|  |  |  |  |

**PLANTING MATERIALS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Crop** | **Variety** | **Quantity (Nos.)** |
| **Fruits** | Lime | Kagzi | 3000 |
|  | Mango | Keshar,Dasheri | 2000 |
| **VEGETABLES** | Tomato | Arka Abhed | 2000 |
|  |  | Arka Samrat | 2000 |
| **FLOWERS AND ORNAMENTAL** | Gaillardia | Grandiflora | 4000 |
|  | Merigold | Raja | 4000 |
|  |  | **Total** | **17000** |

**Bio-products**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Product Name** | **Species** | **Quantity** | |
| **Kg** | **Lit** |
| **BIO PESTICIDES** | **---** | **----** | --- | **---** |
| **BIO FUNGICIDES** | **Tricho -V** | Trichodermaviride | 10000 |  |
| **BIO FERTILIZERS** | PSB | Phosphate solubilizing bacteria | --- | 500 lit |
|  | Rhizo | Rhizobium japonicum | --- | 500 lit |
|  | Azo | Azotobactorcrococum | --- | 500 lit |
|  |  |  |  |  |
| **ANY OTHER** |  |  |  |  |
|  | Vermiculture | Isenia foetida |  | 35 |
|  | Vermicompost | Isenia foetida |  | 21000 |

**LIVESTOCK**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Type** | **Breed** | **Quantity (No.)** |
|
| Cattle | Cross breed | 01 | 01 |
|  | Murrha | 01 | 01 |
| GOAT | Osmanabadi | 20 | 04 |
| SHEEP |  |  |  |
| POULTRY | Giriraj / Sonali | 500 | 10 |
| Pig farming |  |  |  |
| Quail | Japonica | 500 | 10 |

**3.7. Action plan for management of KVK instructional farm**

Total land with KVK : 23.60 ha Cultivable land : 14.38 ha (Irrigated :3.65 ha (K)+1.52 ha(R)+4.71 ha(FC). Rainfed :5.75ha)

Micro-irrigation facility available at KVK: Yes

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S. No. | Name of crop | Name of plot | Area (ha) | Variety | Date of sowing / Planting | Date of harvest | Expected yield (q) |
| 1 | **Kharif Crops** | | | | | | |
|  | soybean | A plot | 3 | PDKV Amba | 15 th June24 | 15 sep to 30 sept.24 | 60 |
| B plot | 2.5 | Phue Kimaya | 15 th June24 | 15 sep to 30 sept.24 | 50 |
| C plot | 1.8 | Phule Durva | 15 th June24 | 15 sep to 30 sept.24 | 35 |
| D plot | 1.20 | Phule sangam | 15 June24 | 15 sep to 30 sept.24 | 25 |
|  | Cotton | C plot | 1 | Nuziviidu/ PKV-Hy-2(Bt) | 15 June24 | 31 Dec 24 | 15 |
|  | Maize | D plot | 1 | PDKV Arambh | 15 June 24 | 15 sep to 30 sept.24 | 30(300)\* |
| 2 | **Rabi crops** | | | | | | |
|  | Bengal gram | B plot | 2.5 | PDKV Kanak/Phule Vikrant | 15 oct -15 nov.24 | 15 Feb25 | 35(25)\* |
|  | Wheat | C plot | 1.8 | PDKV Sardar | 15 Oct –Nov.24 | 15 march 25 | 45 |
| 3 | **Fruit crops** | | | | | | |
|  | Mango | C plot | 0.70 | Kesher/Dashahari | 2002 | May 24 | 02 |
|  | Mango | C plot | 0.50 | Kesher/Dashahari | 2014 | May 24 | 06 |
|  | Aonla | D plot | 1.08 | Krishna | 2003 | Oct 24 | 03 |
|  | Mandarin | B plot | 0.8 | Nagpuri | July 2024 | - | - |
|  | Sweet orange | B Plot | 0.8 | - | July 2024 | - | - |
|  | Guava | C plot | 0.8 | L 49 | July 2024 | - | - |
|  | Lemon | C plot | 0.8 | Kagzi | July 2024 | - | - |
| 4 | **Vegetable crops (Organic based)** | | | | | | |
|  | Brinjal | B plot | 0.20 | Pusa purple long / Arka Harshita | Feb 24 | April 24 | 30 |
|  | Chilly | B plot | 0.20 | Teja | Feb24 | April24 | 30 |
|  | Tomato (R) | B plot | 0.20 | Arka Apeksha /Arka Abhed | Feb-24 | April24 | 25 |
|  | Leafy vegetable( R ) | B plot | 0.20 | Different varieties of leafy vegetable | Jan -24 | March-24 | 10 |
| 5 | **Floriculture crops in garden** | | | | | | |
|  | Gaillardia | Garden | 0.40 | Grandiflora | Feb 24 | June 24 | 20 |
|  | Marigold | Gardan | 0.40 | Butter ball/Pine apple | July 24 | Nov 24 | 10 |
| 6 | Nutritional Garden\* | Back side of Administrative Building | 0.05 | Varieties of different vegetable crops | June 24 | March 24 | 02 |
| 7 | Fodder crops | Vet. plot | 0.52 | Sampurna | June 24 | March 24 | (200)\* |

Abbreviation:- ( )\* - shows secondary production

**4. Literature to be Developed/Published**

**A. Literature developed/published**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Topic** | **Number** |
| 1 | Research papers | 12 |
| 2 | Technical reports | 12 |
| 3 | News letters | 07 |
| 4 | Training manuals | 08 |
| 5 | Popular articles | 15 |
| 6 | Extension literature | 35 |
| 7 | E-publication | 00 |
| 8 | Any other (Please specify) News Paper Coverage | 00 |
|  | **Total** | 89 |

**B. Details of Electronic Media to be produced**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Type of media (CD / VCD / DVD / Audio-Cassette) and video clippings** | **Title of the programme** | **Number** |
| 1 | Video Clipping on Red gram | Performance of Soybean cv DKV Amba | 01 |
| 2 | Video clipping on Bengalgram | Performance of Maize cv PDKV Armbh | 01 |
| 3 | Video clippings | Tomato production under shednet | 02 |
| 4 | Video clippings | Impact of soil test base fertilizer in Mandarin | 01 |
| 5 | video clippings | FLD programme&Feedback of farmers under FLD | 01 |
| 6 | Video Clipping | Backyard Poultry Farming | 1 |
| 7 | Video Clipping | Goat Farming | 1 |
| 8 | CD | Vermicompost Production | 01 |
| 9 | CD | Preparation of Dashparni Ark | 01 |

**C. Details of social media platforms to be started / continued**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Type of social media platform** | **Title / Purpose** | **Number** |
| 1 | YouTube Channel | KVK Ghatkhed Amravati | 01 |
| 2 | Facebook page | KVK Ghatkhed Amravati | 01 |
| 3 | Mobile Apps | Nil | 01 |
| 4 | WhatsApp groups | KVK Farmers Group, Transfer of Technology, Transfer of improved package of practices of crops, FLD Soybean, FLD Redgram , FLD Bengal gram, FLD Wheat | 17 |
| 5 | Twitter Account | KVK Ghatkhed Amravati | 01 |
| 6 | Any other (Pl. Specify) |  | 00 |

**D. Success stories/Case studies identified for development as a case (Based on previous years success)**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Title of success story / case study identified** | **Proposed month for case/story to be prepared/ developed** |
| 1 | Success story of Soybean variety PDKV Amba | Sept 2024 |
| 2 | Success story of Groundnut Variety TAG-73 | May 2024 |
| 3 | Integrated Nutrient management in Mandarin Orange | May 2024 |
| 4 | Impact of Foliar Nutrient on Quality improvement of Mandarin | August 2024 |
| 5 | Success Story of IFS Model adopted by farmer | Oct 2024 |
| 6 | Success of use of Bullock drawn CRIDA palnter for sowing | March 24 |
| 7 | Uses of Trichoderma in mandarin for management of Phytophthora disease | Oct 2024 |
| 8 | Success story of organic farmers | Nov 2024 |

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

**A. Practicing Farmers & Rural Youth**

For Practicing farmers, rural youth and in service personal firstdeveloped an understanding of the farmers & rural youths there farming systems, resources and established rapport with them. Gathered information on cropping system, present level of use of inputs and productivity of major crops, identified the problem and its causes of the area by **group discussion, meeting with opinion leaders, individual contact, visiting villages and farms.**

A meeting of interested farmers was also organized to spell out the problem.

The activities of the KVK were planned and chalked out keeping in view the thrust areas identified. The technological solutions available at hand were compared with the resources available. The solutions for the gaps related to technological, extension and research were identified and were prioritized according to severity and assessed needs of the farmers in question. The villagers in the KVK operational area in selected villages were made aware about functions of farmers group. The interested farmers were trained for identification of problems in agriculture production and allied activities.

**C. In-service personnel**

a) For in service personal prepare the calendar of training programme and submit to Superintendent Agriculture Officer as well as line department.

b) Discussed with offers of line department about the technological problem and identified the training needs

**5.2. Indicate the methodology for identifying OFTs/FLDs**

**For OFT & FLD** the activities of the KVK were planned and chalked out keeping in view the thrust areas identified. The techniques are Transects, informal mapping, diagramming, and innovation assessments (scoring & ranking different actions). The resource mapping also used for to get an impression of the social & physical layout of the village & understand the social structure of the village & to get an impression of the natural environment. The technological solutions available at hand were compared with the resources available. The solutions for the gaps related to technological, extension and research were identified and were prioritized according to severity and assessed needs of the farmers in question.

The secondary data was also collected and analyzed. The outcomes from the discussions held with University Scientists and Extension functionaries were also taken into account.

**5.3. Field activities**

i. Name of villages identified/adopted with block name (from which year) -

|  |  |  |  |
| --- | --- | --- | --- |
| Name of villages identified | No. of farm families selected per village | Block | Year |
| Kara | 75 | Dharni | 2016 |
| Kota | 100 |
| Nanduri | 75 |
| Kot | 25 |
| Jambhu, | 25 |
| Chitri | 75 |
| Kesharpur, | 232 | Chikhaldara | 2018 |
| Bhiroja | 25 |
| Chikhali | 25 |
| Beskheda | 176 | Chandur bazar | 2018 |
| Sonegaon | 50 | Chandur rly | 2018 |
| Marda | 30 | Tiosa | 2019 |

iii. No. of survey/PRA conducted : One

iv. No. of technologies taken to the adopted villages: 05

v. Name of the technologies found suitable by the farmers of the adopted villages:

Bengal gram variety JAKI 9218 found suitable by the farmers of the adopted villages

vi. Impact (production, income, employment, and area/technological– horizontal/vertical)

**Yield and Gap analysis of FLD on Bengal gram**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Area (ha) | No. Of FLDs | Potential Yield  (Kg/ha) | Demo yield (Kg/ha) | Local check (kg/ha) | Additional yield over local check | Yield increases over FP (%) | Tech Gap (Kg/ha) | Extension Gap  (Kg/ha) | Tech index (%) |
| 2015-16 | 100 | 250 | 2000 | 1620 | 1310 | 310 | 23.66 | 380 | 310 | 19 |
| 2016-17 | 10 | 30 | 2000 | 1370 | 1150 | 220 | 19.14 | 630 | 220 | 31.5 |
| 2017-18 | 12 | 30 | 2000 | 1970 | 1585 | 385 | 24.29 | 30 | 385 | 1.5 |
| 2018-19 | 10 | 38 | 2000 | 1550 | 1340 | 210 | 15.67 | 450 | 210 | 22.5 |
| **Overall Average** | **33** | **87** | **2000** | **1627.5** | **1346.25** | **281.25** | **20.69** | **372.5** | **281.25** | **18.62** |

**Economic analysis of FLD on Bengal gram**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Cost of cultivation | | Gross Return | | Net Return | | Additional Return | BRC | |
| Demo | FP |
| Demo | FP | Demo | FP | Demo | FP | Demo | FP |
| 2015-16 | 21210 | 18450 | 68425 | 55675 | 47215 | 37225 | 9990 | 3.22 | 3.01 |
| 2016-17 | 23540 | 22850 | 61650 | 51750 | 38110 | 28900 | 9210 | 2.61 | 2.26 |
| 2017-18 | 24250 | 21550 | 68950 | 55475 | 44700 | 33925 | 10775 | 2.84 | 2.57 |
| 2018-19 | 24300 | 21650 | 66650 | 57620 | 42350 | 35970 | 6380 | 2.74 | 2.66 |
| **Overall Average** | **23325** | **21125** | **66419** | **55130** | **43094** | **34005** | **9089** | **2.84** | **2.60** |

vii. Constraints if any in the continued application of these improved technologies

Availability of seed material and bio-fertilizers is the major constraints

**6. LINKAGES**

**6.1. Functional linkage with different organizations**

|  |  |
| --- | --- |
| ATMA Amravati | Sponsoring Training Programme on farmer scientist interaction, Linkages to women farmer SHGs, joint diagnostic survey, joint implementation,participation in meeting,conducting training programmes and demonstration, Exposure visits |
| DRDA | For SJGSY Training |
| Dept of Pashusawardhan | Veterinary camp and Technical advice |
| Agriculture college, Amravati | joint implementation,participation in meeting,conducting training programmes, Exposure visit |
| Agriculture department | joint implementation,participation in meeting,conducting training programmes and demonstration,contribution received for infrastructural development |
| Agriculture Skill Council Of India | Training Partner |
| CCRI,Nagpur | Technical Support |
| Collector office | contribution received for infrastructural development, participation in meeting |
| Department of women & Child Department in ZP,Amravati | F or conducting Health regarding Training programme |
| District Rural Development Agency (DRDA) | Combine Training Programme |
| Dr. PDKV Akola University | Technical guideline, joint implementation,participation in meeting,conducting training programmes and demonstration |
| Food Technology College, Pada, Badnera | joint implementation,participation in meeting,conducting training programmes, Exposure visit |
| MAFSU, Nagpur | Technical advice |
| MAVIM | Combine Training Programme |
| Nice system Approach Manage, Hyderabad | Content Creator/Manager, |
| RAMETI | Training to Extension officers & workers. |
| Reliance Foundation | Combine Training Programme |
| Sant Gadge baba Amravati University, Amravati | Guidance about pogramme/Training,/Library |
| State Agriculture Department | Training ,Diagnostic Visit |
| VNMKV Parbhani | joint implementation of scheme under UAE participation in meeting, conducting training programmes and demonstration of bullock drawn implements |

6.2. Details of linkage with ATMA

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Programme** | **Nature of linkage** |
| 1 | Training on Pulses and oilseed | Technical guidance for implementation of programm |
| 2 | Guest lecture and Field visit in farmenr field school | Guest Lecture and Field visit as diagnostic and scientific visit |
| 3 | Implementation of sponsored extension activities | Collaborative |
| 4 | Popularization of BBF technology | Demonstrations and training |
| 5 | Popularization of machinery used for organic farming | Demonstrations and training |

**6.3. Give details of programmes under National Horticultural Mission**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Programme** | **Nature of linkage** |
| 1 |  |  |
| 2 |  |  |

**6.4. Nature of linkage with National Fisheries Development Board**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Programme** | **Nature of linkage** |
| **1** |  |  |
| **2** |  |  |

## 6.5. Additional Activities planned including sponsored projects (NARI/DAESI/DAMU/DFI/PKVY,Skill Trainings, etc.) / schemes during 2021, if involved.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Name of the agency / scheme** | **Name of activity** | **Technical programme with quantification** | **Financial outlay (Rs.)** | **Names of the team members involved** |
| **1.** | TSP | FLD | Increasing the yield of leafy vegetables | 20000/- | Dr.A.P.Phuse |
| **2.** | ATMA | Training and Demonstration on Natural farming | Class room course work  Practical, Demonstration | -- | KVK |
| **3.** | TSP | Training and Demonstrations and Exposure Visit | On & Off campus trainings | -- | KVK |
| **4.** | TSP | FLD on management of wilt disease in Bengal gram- Seed treatment of *Trichoderma viride* 1% WP@ 10g/kg seeds + two applications of *Trichoderma viride* 1% WP@ 2.5 kg/ha in 250 kg FYM at sowing and at 50% flowering stage. | 01 | 18750 | SMS(Plant Prot.) SMS(Agro),SMS(Extn.); |
| **5.** | TSP | FLD on management of leaf eating catterpillars in soybean- Four sprays of Neem Seed extract @ 5% starting at 20 days of crop emergence with subsequent sprays at 10 days interval | 01 |  | SMS(Plant Prot.) SMS(Agro),SMS(Extn.); |
| **6.** | TSP | Trainings | 08 | 6000 | SMS(Plant Prot.) SMS(Agro),SMS(Extn.); |
| **7.** | TSP | Kisan goshti | 04 | 6000 | SMS(Plant Prot.) SMS(Agro),SMS(Extn.); |
| 8 | TSP | vermicompost /vermiwash production units | 25 | 50000 | SMS(Plant Prot.) SMS(Agro),SMS(Extn.); |
| 9 | TSP | Frontline demonstrations | 04 | 40000 | SMS(Agro),SMS(Extn.) |
| 10 | TSP | Trainings | 06 | 6000 | SMS(Agro),SMS(Extn.) |
| 11 | TSP | Demonstration | 03 | 5000 | SMS(Agro),SMS(Extn.) |

## 6.5.1. Details of activities planned in DFI villages

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name of DFI village selected** | **Total No. of families in the village** | **Interventions planned during 2022** | **No. of families to be covered under the intervention** | **Present annual income of the family**  **(Rs /annum)** | **Expected annual income of the family after intervention (Rs/ annum)** |
| Kesharpur | 232 | Trainings & Field visit | 20 | 25000/ha | 50000/ha |
| Beskheda | 176 | Trainings & Field visit | 20 | 28000/ha | 55000/ha |
| Beskheda Tq.Chandur bazar | -- | FLD on managment of stem fly and girlde beetle in Soybean | 20 | 50000 | 100000 |
| Kesharpur Tq | ---- | FLD on mnagement of wilt disease in bengal gram | 25 | 25000 | 60000 |

## 6.5.2. Details of activities planned under NARI (Including FSN project)

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Name of the village | Activities planned | No. of families to be covered |
| 01 | Kesharpur and Chitri | Training and Demonstration on production of bio-fortified variety of Wheat | 25 |

## 6.5.3. Details of activities planned under Paramaparagat Krishi Vikas Yojana (PKVY)

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Name of the village | Activities planned | No. of families to be covered |
|  |  | Nil | 00 |

## 6.5.4. Details of skill trainings planned (sponsored by ASCI)

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Name of Job Role | Duration (No. of hours) | No. of participants |
| 01 |  |  |  |
| 02 |  |  |  |

## 6.5.5. Details of activities planned under TSP

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Name of the village** | **Activities planned** | **No. of families to be covered** |
| 1. | Lawada , Sosokheda, Chitri | Training and Demonstration on New technology of production of Green gram, Bengal gram and Wheat | 50 |
| 2. | Chitri | Training, FLD, Diagnostic visit for organic farming in Onion | 20 |
| 3. | Lawanda | Training, FLD, Diagnostic visit Natural farming for leafy vegetables | 20 |
| 4. | sosokheda | Training, FLD, Diagnostic visit Natural farming for Pea | 20 |
| 5. | Lawada | Training & Demonstration on Vermicompost production | 20 |
|  |  | Training on Organic farming | 20 |
|  |  | Group formation for millets marketing | 20 |
|  |  | Exposure Visit of farmers | 15 |
| 6. | Sosokheda | Training & Demonstration on Vermicompost production | 20 |
|  |  | Group formation for millets marketing | 20 |
|  |  | Training on Organic farming | 20 |
|  |  | Exposure Visit of farmers | 15 |
| 7 | Lawada,Sosokheda,Nanduri | FLD on improved bullock drawn implements like as CRIDA planter, stubble collector, Threetyneweeder,three row seed drill,feri hoe.  Demonstration on Primary Processing machinery for Paddy and minor millets | 100 |
| 8 | Lawada,Sosokheda,chitri | Training on Small scale processing and value addition for millets, micro irrigation systems and In situe water conservation practices under Jalshakti abhiyan | 100 |
| 9 | Kotha | To create the awareness amongest the farmers for the use of primary processing machinery for millets to increase the value of crop in tribal area | 100 |
| 10 | Lavada Tq..Dharni | FLD on management of leaf eating catterpillars in soybean ‘  Trainings programmes, Kisan Goshti , Field Day & Diagnostic visits | 25 |
|  |  | Demonstration units of Vermicompost & vermiwash | 05 |
| 11 | Sosokheda Tq..Dharni | FLD on management of wilt disease in Bengal gram Trainings programmes, Kisan Goshti , Field Day & Diagnostic visits | 25 |
|  |  | Demonstration units of Vermicompost & vermiwash | 051 |
| 12 | Sosokheda , Tq.Dharni | FLD on Supplementation of cheleted mineral mixture and deworming ,Trainings ,Kisan Goesthi , Field Day & Field visits | 20 |
| 13 | Sosokheda Tq.Dharni | FLD on Introduction of new poultry breeds Trainings ,Kisan Goshti , Field Day & Fieldvisits | 20 |
| 14 | Chitri , Tq.Dharni | FLD on Prevention of calf mortality, Trainings ,Kisan Goesthi , Field Day & Field visits | 20 |
|  | Lawada ,Tq.Dharni | FLD on prevention of calf mortality  Trainings ,Kisan Goshti , Field Day & Field visits | 20 |

## 6.5.6. Details of activities planned under Krishi Kalyan Abhiyan (KKA)

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Name of the village | Activities planned | No. of families to be covered |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## 6.5.7. Details of seed production planned under Seed Hub on Pulses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No. | Name of the crop | Variety | Stage  (Foundation / Certified) | Quantity of seed to be produced (q) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Total |  |

**6.6. Activities planned in respect of FPOs / FPCs**

1. No. of FPOs / FPCs to be formed: Nil

2. No. of existing FPOs / FPCs to be facilitated: 02

3. Type of support to be provided to existing FPOs / FPCs:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No** | **Name of the FPO / FPC** | **No. of members** | **Major activities of FPO / FPC** | **Type of support to be provided by KVK** |
| 1 | Vishweyshwar Shetkari Producer Company Ltd | 330 | Cleaning & Grading of Wheat | Training on Mechanization & marketing |
| 2 | Satpuda Shethkari Santra &Dhanya Prducer Company | 497 | Cleaning & Grading of Wheat, Initiate the activity to start Krishi Seva Kendra | Training on Mechanization & marketing of inputs |

**6.7. Activities planned in respect of developing Integrated Farming System (IFS) Models on farmers’ fields during 2021**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Name of the village** | **No. of IFS models to be identified / developed** | **Major components of IFS model** |
| 01 | Sosokheda Tq. Dharni | 01 | Agriculture- Animal Husbandry- Processing, Vermicompost production |

**7.0 Convergence with other agencies and line departments in the district:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Name of the department / Agency** | **Type of convergence** | **Area (ha) / No. of farmers to be benefited** |
| 1 | Agriculture Department | Soil testing under National Sustainable agriculture Mission | 2000 |
| 2 | State Agriculture Department (ATMA) | Exposure Visit of farmers | 30 |
| 3 | TAO,Dharni | Popularization of BBF technology and participation in Training and Demonstrations | 100 |
| 4 | UAE,VNMKV,Parbhani | Popularization of bullock drawn improved implements and machinery under TSP of UAE,VNMKV,Parbhani | 50 |

**8. Innovator Farmer’s Meet 2023**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Particulars** | **Details** | **Expected No. of participants** |
| 1 | Farm innovators meet planned | Sept 2023 | 80 |
| 2 | Orange growers meet | July-August | 25 |
| 3 | Farm innovators meet planned on Natural and Organic farming | Sept 2024 | 80 |

**9. Utilization of hostel facilities**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Month** | **No. of days to be utilized** |
| **1** | Jan 24 | 15 |
| **2** | Feb 24 | 15 |
| **3** | March 24 | 15 |
| **4** | Apr 24 | 15 |
| **5** | May 24 | 15 |
| **6** | June 24 | 15 |
| **7** | July 24 | 15 |
| **8** | Aug 24 | 15 |
| **9** | Sept 24 | 15 |
| **10** | Oct 24 | 15 |
| **11** | Nov 24 | 15 |
| **12** | Dec 24 | 15 |
|  | **Total** | **180** |

**10. Details of online activities planned (If any)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Type of activities** | **No. of programmes** | **Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live, etc)** | **No. of participants to be covered** |
| 1 | Farmers trainings | 10 | Video conferencing / Audio Conferencing / | 500 |
| 2 | Farmers scientist’s interaction programme | 12 | Video conferencing / Audio Conferencing / | 720 |
| 3 | Farmers seminars | 05 | Video conferencing / Audio Conferencing / | 300 |
| 4 | Expert lectures | 07 | Video conferencing / Audio Conferencing / | 210 |
| 5 | Any other (Pl. specify) | -- | Video conferencing / Audio Conferencing / | 00 |

**11. Details of collaborative applied research projects planned if any**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Name of the research project** | **Funding agency** | **Collaborating organizations** | **Year of commencement** | **Major activities planned** |
| 01 | Nil | Nil | Nil | Nil | Nil |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**12 Other**

1. **Technological Week planning**

|  |  |
| --- | --- |
| **Month** | **Crop** |
| Oct 2024 | 2nd  to 3rd week of Oct 2024 |
| **Activities** | |
| 1 | Kisan Gosthies |
| 2 | Lectures organized |
| 3 | Farm Visit |
| 4 | Diagnostic visits |
| 5 | Supply of Literature |
| 6 | Supply of planting materials |
| 7 | Supply of Trichoderma and information |
| 8 | Visits to different units at KVK |
| 9 | Involve other other organisation in Technological week |

**2. Farmers Field School (FFS) planned 2022**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Thematic area** | **Title of the FFS** | **Budget proposed in Rs.** |
| 1 | Poultry Farming | Introduce new poultry breed for backyard poultry farming | 40000 |
| 2 | Quail Farming | New entrepreneurship business | 40000 |

1. **Action Plan for Millets 2024**

**Introduction:**

Millet is one of the most important food crops in tribal area of Amravati district. These crops supplement nutrition and ensure the household food security.

Korku and Gond predominant communities were cultivating millets but are now rapidly on the decline due to displacement by other crops. Also Farmer's cultivated traditional varieties that are well adapted to marginal growing conditions in small area & are rapidly disappearing as these are considered as minor crops and receive very little or no attention.

**Present situation:**

The farmers in some villages of tribal area cultivated local (traditional) seed in very small area. The intensive training on improved seeds with package of practices and processing of millets will help in increasing acceptance of millets cultivation. Similarly, demonstration of improved varieties of millets as well as millets processing and product preparation will make the awareness among the consumers.

**Prioritized problem**

1. Lack of knowledge and non adoption of improved varieties of millets,
2. Lack of technical knowledge, lack of awareness about preparation of millets food and it’s by products
3. Poor market infrastructure and fluctuated market price
4. Involvement of middleman in marketing
5. Lack of Knowledge about Innovative edible and eco friendly products
6. Lack of knowledge about improved varieties of Millets

**Activities Planned**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.No** | **Activity** | **Topic** | **Month** | **Venue** | **No. Of Participants** | **Guest** |
| 1 | Awareness activity | To popularize and create awareness on healthy diet based on local foods and on the important health benefits of small millets and the need for including it in the regular diets | June 2024 | Sosokheda  Tq. Dharni  Lawada  Tq. Dharni | 100 | TAO Dharni |
| 2 | Method Demonstration | **Seed Treatment for Rainfed Millet Cultivation (Seed Hardening)** | July & Aug 2024 | Sosokheda  Tq. Dharni  Lawada  Tq. Dharni | 50 | TAO Dharni |
| 3 | Training | Training on participating tribal groups of youth in the marketing of Whatever millets are produced will be processed and sold through the group | Aug 2024 | Sosokheda  Tq. Dharni | 25 | **--** |
| Training on participating tribal groups of youth in the marketing of Whatever millets are produced will be processed and sold through the group | Sept 2024 | Lawada  Tq. Dharni | 25 | **--** |
| 4 | Field visit | Field visit to Demonstration plot of millets at farmers field | Sept 2024 | Sosokheda  Tq. Dharni | 25 |  |
| Sept 2024 | Lawada  Tq. Dharni | 25 |  |
| 5 | Exposure Visit | Exposure visit of Tribal farmers to KVK Demonstration unit of Millet | Oct 2024 | Sosokheda  Tq. Dharni  Lawada  Tq. Dharni | 25 |  |

**Seed Treatment for Rainfed Millet Cultivation (Seed Hardening)**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Chemical and Concentration** | **Soaking duration (h)** |
| Maize, Varagu, Tenai and Samai | 2% potassium dihydrogen phosphate | 8 |
| Pearl Millet | 2% potassium chloride | 16 |
| Sorghum | 2% potassium dihydrogen phosphate | 6 |
| Ragi | 0.5% calcium chloride | 6 |

1. **Action Plan for Natural & Organic farming**
2. Conducting On farm testing of technologies released by various institutes/ agricultural universities.
3. Organizing front line demonstration of technologies developed by various institutes/ agricultural universities.
4. Imparting training to extension functionaries, in-service employees, rural youth and progressive farmers.
5. Establishment of organic input production units at KVK,s instructional farm.

* Earmarked 02 ha organic farm is secured for demonstration
* Vermicompost unit & vermiwash unit
* PDKV compost & Nadep Compost
* Botanical pesticide production unit
* Organic vegetable production & sale unit
* Strengthening of bio control laboratory
* Registration of 02 ha area of KVK,s farm under natural/organic certification.

1. Dissemination of natural/organic production technologies among the various stakeholders of society**.**
2. **Action plan for Aspersion villages ( Tribal Area)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Activity** | **Topic** | **Venue** | **No. of Participants** |
| 1 | Awareness activity | To popularize and create awareness on Millets production & Organic farming | Sosokheda Tq. Dharni & Kehsrpur | 100 |
| 2 | Method demonstration | Seed Treatment for Rainfed Millet Cultivation (Seed Hardening) | Lawada Tq. Dharni & Keshapur  Tq. Chikhaldara | 50 |
| 3 3 | Training | Training on participating tribal groups of youth in the marketing of Whatever millets are produced will be processed and sold through the group | Sosokheda  Tq. Dharni | 25 |
| 4 | Vermicompost Unit | Method Demonstration | Sosokheda & Tq. Dharni | 10 |
| 5 | Panchgavya and Beejamrat | Method Demonstration | Kesharpur Tq. Chikhaldara | 10 |
| 6 | Jeevamrat and Ghanjeevamrut | Method Demonstration | Sosokheda & Tq. Dharni | 10 |
| 7 | Preparation of different natural formulation | Method Demonstration | Kesharpur Tq. Chikhaldara | 10 |
| 8 | Mulching | Method Demonstration | Sosokheda & Tq. Dharni | 10 |
| 9 | Exposure Visit | Method Demonstration | Kesharpur Tq. Chikhaldara | 15 |

1. **Action Plan for Swachhta Related Activities and Expenditure details**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Month | Types of major Activity | | | Venue | Expenditure (Rs.in Lakhs) for these activities |
| Swachhta Pakhwada, Cleaning, Awareness workshop | Vermicompost activity | |  |  |
| March 24 | Cleaning of instructional farm | -- | | On Campus | 0.01 |
| April 24 | Swachatta activity at instructional farm | -- | | On Campus | 0.01 |
| May 24 | Stock taking on digitization of office records/ e-office implementation. | -- | | On Campus | 00 |
| June 24 | -- | Method demonstration programme of vermicompost production | | Off | 0.02 |
| July 24 | Plantation of trees |  | | Off | 0.05 |
| Aug 24 | --- | Method demonstration of vermicompost production | | Off | 0.02 |
| Sept 24 | Display of banner at prominent places of village | -- | | Off | 0.02 |
| Oct 24 | SwachhtaPakhwada 2nd Oct 2021 to 31st Oct 2021 | | | On & Off | 0.06 |
| Nov 24 | Cleanliness drive including cleaning of offices, corridors and premises. | | -- | On | 0.01 |
| Dec 24 | -- | | Method demonstration programme of vermicompost production | Off | 0.05 |
|  |  | | **Total** | | **0.25** |

1. **Action Plan for Jalshakti Abhiyan**

|  |  |  |  |
| --- | --- | --- | --- |
| **Month** | **Type of Major Activity** | **Venue** | **Expenditure** |
| July 2024 | Awareness programme on efficient water use for irrigation | KVK | 0.02 |
| Aug 2024 | Water conservation practices | Sosokheda | 0.01 |
| Oct 2024 | Importance of Rain water harvesting | KVK | 0.01 |

**Annexure - i**

**Impact of front line demonstrations on yield enhancement and economics of Mandarin Orange in Amravati District**

**Introduction:** Mandarin Orange is the major fruit crop growing in Amravati district having 71507 ha area and the average productivity is 82.36 qt/ha. One of the major reason for decreasing the productivity and quality of Mandarin orange is due to unbalanced fertilizer management and lack of adoption of improved cultivation practices.

Keeping in view KVK implemented the front line demonstration programme on balanced fertilizer management in Mandarin Orange.

**Hence, present study will be undertaken with the following specific objective.**

**Objectives:**

1. To study the impact of Front line demonstration on yield enhancement and economics of Mandarin orange

**Methodology:**

* The research will be conducted in KVK adopted villages in Amravati district
* 25 FLD farmers from KVK adopted villages will be selected by random sampling technique and the yield data as for demonstrations and farmers practices will be collected on the equal area.
* Relevant information will be collected by personal interview schedule

**Table 1: Yield and Gap analysis of FLD on Mandarin Orange**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Area (ha) | Potential Yield (Kg/ha) | Demo yield (Kg/ha) | Farmers Potential (FP kg/ha) | Yield increases over FP (%) | Ext. Gap | Tech Gap (Kg/ha) | Tech index (%) |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Overall Average |  |  |  |  |  |  |  |  |

**Table 2: Economic analysis of FLD on Mandarin Orange**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Cost of cultivation | | Gross Return | | Net Return | | Additional Return | BRC | |
| Demo | FP |
|  | Demo | FP | Demo | FP | Demo | FP | Demo | FP |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Overall Average |  |  |  |  |  |  |  |  |  |

**Analysis of Data**

The following formula will be used for analysis of data

1. Technology gap = Potential yield – Demonstration yield
2. Extension Gap = Demonstration yield – yield under existing practice
3. Technology Index = Potential yield – Demonstration yield

-------------------------------------------------- x 100

Potential yield

1. Additional Return = Demonstration return – farmers Potential return
2. Net return = Total ( Gross ) Returns – Total Cost of production

**Annexure - ii**

**Impact of Front line Demonstration of oilseed & Pulses production Technology in farmer’s field of Tribal area of Amravati District in Maharashtra**

**Basic Information of the Tribal Area in the District:**

The tribal dominated area (Melghat area) in Amravati district has mainly divided into two Talukas one is Dharni and another is Chikhaldara & comes under tribal sub plan. As per 2011 census the tribal population was 13.98 percent in the district. In Dharni & Chikhaldara the tribal population is 142191 and 91206 respectively. Both the tahasils are having maximum number of tribal population. According to 2011 census, the tribal population is 80 percent in Dharni tahasil while it is 78 percent in Chikhaldara tahsil. The combined area of Dharni & Chikhaldara tahsil is generally known as Melghat Region. In this region tribal population to total population is 77 percent.

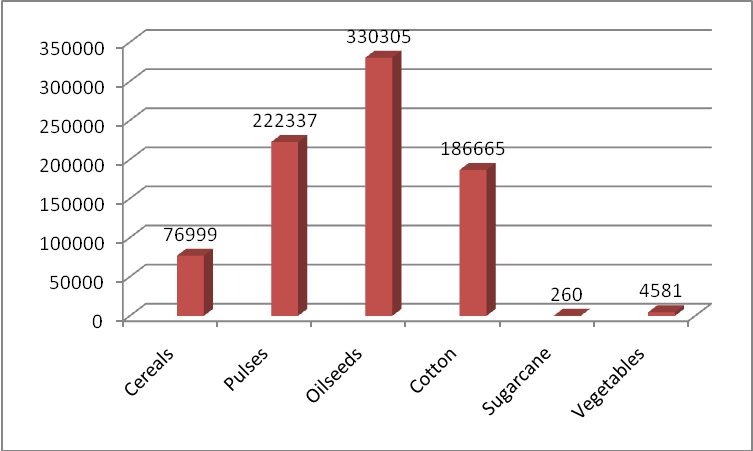
The major tribe’s viz. Gonds, Nihals and Mongias. Balais, Vanjaris, Gaolies, etc are resident in the Melghat area. In language and general type they are said to be identical with the Kols and Santals. Their common language is Korku but Hindi is also commonly spoken among them. Korku language belongs to Munda stock of aboriginal language.

**Geographic, Demographic & Agriculture profile of Amravati District**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Title | Amravati District | Tribal Dominated Area | |
|  |  |  | Dharni | Chikhaldara |
| 1 | Geographical area ( ha) | 121723 | 26644.14 | 250800 |
| 2 | Cultivable area | 7.81 lakh ha | 52380 | 30520 |
| 3 | Forest land | 3.17112 lakh ha | 77814 ha | 210448 |
| 4 | Average Kharif season area | 7.15 lakh ha | 47214 | 24034 |
| 5 | Major Kharif Crops | Soybean, Cotton, Red gram | Soybean, Paddy, Cotton, Red gram, Maize | Soybean, Sorghum, Paddy, Red gram |
| 6 | Average Rabi season Area | 1.48 lakh ha |  |  |
| 7 | Major rabi Crops | Wheat, Gram |  |  |
| 8 | Average Summer season Area | 0.94 lakh ha |  |  |
| 9 | Average Annual Rainfall | 815 mm | 1172 mm | 1526 mm |
| 10 | Area under Irrigation( created) | 1.34 lakh ha |  |  |
| 11 | No. of Villages | 1997 | 156 | 193 |
| 12 | Total population | 2888445 | 184665 | 118815 |
| 13 | Total no. of households | 647451 | 35596 | 22546 |
| 14 | No. of Cultivators | 415858 | 25281 | 12501 |
| 15 | Scheduled Caste Population | 506374 | 7908 | 7288 |
| 16 | Scheduled Tribes Population | 404128 | 142191 | 93050 |
| 17 | No. of small farmers ( Less than 1 ha) | 140423 (34%) |  |  |
| 18 | No. of Marginal farmers  (1 to 2 ha) | 171834 (41%) |  |  |
| 19 | No. of Medium farmers  ( 2 to 10 ha) | 101315 (24%) |  |  |
| 20 | No. of Large farmers  ( More than 10 ha) | 2288 (1%) |  |  |
| 21 | Average Size of Land Holding | 1.87 ha |  |  |

**Introduction:** Krishi Vigyan Kendra, Ghatkhed is working in Amravati district. The total geographical area of the district is 12.21 lack ha. This is 3.96% of the total area of the state. The district is divided into 14 tehsils (blocks) its district head quarter is Amravati. The district comprises of one municipal corporation, ten municipal cities and 842 Panchayats working for rural development of the district. The total numbers of villages are 2157 out of which 394 are inhabited. The district has two tribal blocks. (1) Dharani and (2) Chikhaldara. The “Korku” is dominating tribe. This area is commonly known as “Melghat”.

The total average sowing area of the district is 728112 ha. Out of total average sowing area actual sowing area during kharif 2018-19 are 684519 ha, which is 94.01 percent in respect to total average sowing area of the district while 169341 ha area is under rabi crops.



It observed that the major area of district is under Oilseeds & pulses keeping in view the above the impact of Frontline Demonstrations of Pulses on demonstrator farmers, in terms of change in Average yield and cost parameters of Demonstration and local plots is planned.

**Methodology**

KVK had adopted villages in tribal area of Amravati District under Tribal Sub plan and conducted various programmes for improving the productivity of oilseeds & pulses. The present study was carried out in KVK adopted villages in Dharni Taluka of Amravati district. 50 farmers were selected by random sampling method from the KVK adopted villages in tribal dominated area. On the basis of the objectives of study, and exhaustive interview schedule was designed and data were collected from these farmers by personal interview method.

For the present study, constraints refer to problems and difficulties faced by the farmers during the adoption of bio fertilizers. Efforts were made to identify the constraints faced by farmers in actual use of bio fertilizers. The farmers were asked to indicate the difficulties they have encountered, regarding the various aspects connected with the use of bio fertilizers such as technical constraints, economic constraints,Constraints related to input service supply and other constraints. The difficulties reported by the farmers were listed out then frequencies and percentage to each were worked out and the rank was given to the each constraint based on the frequencies.

**Objective**

To ascertain the impact of Frontline Demonstrations on demonstrator farmers, in terms of change in Average yield and cost parameters of Demonstration and local plots

## Methodology

1. A list of respondents under the pulses demonstration was implemented by Krishi Vigyan Kendra from last 3 years will be prepared.
2. Tabulation of data viz. problems, technological options and extension methods used

i.e. field problems & Selected technologies to be transferred

1. Tabulated the data viz. total crop wise area, no. of farmers, crop wise average production
2. Tabulated the data of extension activities from last 3 years

**Data collection**

**Table-1** Area, production and productivity of Major Oilseeds & Pulses

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Particular | India | | Maharashtra | | Amravati | |
| Red gram | Bengal gram | Red gram | Bengal gram | Red gram | Bengal gram |
| 1 | Area (Lakh ha) |  |  |  |  |  |  |
| 2 | Production (Lakh ton) |  |  |  |  |  |  |
| 3 | Productivity  ( Kg/ha) |  |  |  |  |  |  |

**Table-2 Average yield and cost parameters of Demonstration and local plots of Oilseeds & Pulses**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop** | **Variety/Technology** | **Season** | **No. of FLD** | **Area(ha)** | **Av. Yield qt/ha** | | **% increase** |
| **1** | **2** | **3** | **4** | **5** | **6** | | **7** |
|  |  |  |  |  | Demo | Check |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gross Cost Rs/ha** | | **Gross Return Rs/ha** | | **Net Return Rs/ha** | | | **C:B ratio** |
| **8** | | **9** | | **10** | | | **11** |
| **Demo** | **Check** | **Demo** | **Check** | **Demo** | **Check** | |  |
|  |  |  |  |  | Demo | Check |  |
|  |  |  |  |  |  |  |  |

**Annexure - I**

## Training Programme

**i) Farmers & Farm women (On Campus)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Clientele** | **Title of the training programme** | **Duration in days** | **Number of participants** | | | **Number of SC/ST** | | | **G. Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| **Crop Production** | | | | | | | | | | |
| 12/06/24 | PF | Improved Production Technology of Pigeon pea and Soybean | 01 | 75 | 25 | 100 | 25 | 10 | 35 | 100 |
| 10/07/24 | PF | Natural farming | 01 | 75 | 25 | 100 | 25 | 10 | 35 | 100 |
| 25/7/24 | PF | Integrated Nutrient management in cotton and Pigeon pea | 01 | 25 | 05 | 30 | 02 | 01 | 3 | 30 |
| 07/05/24 | PF | Creation of awareness among farmers about cultivation of Millets | 01 | 25 | 05 | 30 | 04 | 06 | 6 | 30 |
| 10/10/24 | PF | Organic farming | 01 | 75 | 25 | 100 | 25 | 10 | 35 | 100 |
| **Soil Health** | | | | | | | | | | |
| 18/03/24 | PF | Soil health management | 01 | 50 | 25 | 75 | 20 | 10 | 30 | 75 |
| 05/05/24 | PF | Soil and Water conservation practices | 01 | 25 | 05 | 30 | 05 | 02 | 7 | 30 |
| **Horticulture** | | | | | | | | | | |
| 08/5/2024 | PF | Improved package of practices for Mandarin Orange | 03 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 22/7/2024 | PF | Importance of Bio-fertilizers in vegetable production | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 15/10/2024 | PF | Improved package of practice for onion | 03 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 14/7/2024 | PF | Nursery management | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 12/8/2024 | PF | Protective Cultivation for Vegetable under shednet | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **Agril Extension** | | | | | | | | | | |
| 9/03/24 | PF | Motivation of farmers about Group formation for Millets production | 01 | 15 | 0 | 15 | 02 | 0 | 02 | 17 |
| 5/04/24 | PF | Entrepreneurship development through vermicompost production | 01 | 20 | 05 | 25 | 04 | 01 | 05 | 30 |
| 6/06/24 | PF | Training programme on atural farming | 02 | 30 | 20 | 50 | 08 | 02 | 10 | 60 |
| **Livestock prod.** | | | | | | | | | | |
| 16/02/2024 | PF/FW | Preventive measure for parasitic infestation in animals | 1 | 20 | 2 | 22 | 6 | 2 | 8 | 30 |
| 05/03/2024 | PF/FW | Management of chicks, grower, and Layer | 1 | 10 | 5 | 15 | 5 | 2 | 7 | 22 |
| 08/04/2024 | PF/FW | common diseases and its control measure in large animal | 1 | 15 | 5 | 20 | 2 | 3 | 5 | 25 |
| 17/05/2024 | PF/FW | Cultivation of green fodder | 1 | 15 | 5 | 20 | 4 | 2 | 6 | 26 |
| 04/06/2024 | RY | Sheep and goat rearing | 1 | 15 | 5 | 20 | 4 | 1 | 6 | 25 |
| 19/07/2024 | RY | Quail Farming | 1 | 15 | 5 | 20 | 4 | 1 | 6 | 25 |
| **Agril. Engg.** | | | | | | | | | | |
| 10/1/2024 | PF | PKV Mini dal mill- a simple processing unit for pulses | 2 | 5 | 5 | 10 | 5 | 15 | 20 | 30 |
| **Home Sc.** | | | | | | | | | | |
| May 24 | PF | Introduction and use of women friendly implements for farm women | 01 | 05 | 10 | 15 | 05 | 05 | 10 | 25 |
| July 24 | PF | Recycling Kitchen waste through Vermin culture bio technology | 01 | 05 | 10 | 15 | 05 | 05 | 10 | 25 |
| Nov 24 | PF | Different Techonologies for keeping fish in secure | 01 | 05 | 10 | 15 | 05 | 05 | 10 | 25 |

**i) Farmers & Farm women (Off Campus)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Clientele** | **Title of the training programme** | **Venue** | **Duration in days** | **No. of participants** | | | **Number of SC/ST** | | | **G. Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| **Crop Production** | | | | | | | | | | | |
| 19/01/24 | PF | Improved Production technology of Groundnut | Lawada and Sosokheda | 01 | 40 | 10 | 50 | 38 | 10 | 48 | 50 |
| 23/2/24 | PF | Organic/Natural farming | Sosokheda and Lawada | 01 | 40 | 10 | 50 | 38 | 08 | 46 | 50 |
| 15/03/24 | PF | Pest and disease management of Green gram and Groundnut | Sosokheda and Lawada | 01 | 70 | 05 | 75 | 65 | 05 | 70 | 75 |
| 27/06/ 24 | PF | Improved production technology of Millets | Lawada | 01 | 75 | 25 | 100 | 60 | 15 | 75 | 100 |
| **Soil health and fertility management** | | | | | | | | | | | |
| 24/02/24 | PF | Soil and water testing | Lawada | 01 | 20 | 05 | 25 | 18 | 04 | 22 | 25 |
| 06/04/24 | PF | Soil and water testing | Sonegaon | 01 | 25 | 05 | 30 | 10 | 1 | 11 | 30 |
| **Horticulture** | | | | | | | | | | | |
| 15/4/2024 | PF | Rejuvenation of Mandarin crop | Sosokheda Tq. Dharni | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 16/6/2024 | PF | Integrated Nutrient management | Sosokheda Tq. Dharni | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 21/9/2024 | PF | Spices and condiments | Sosokheda Tq. Dharni | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 10/10/2024 | PF | Cultivation of Fruits crop | Sosokheda Tq. Dharni | 03 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 18/10/2024 | PF | Water management | Lavada Tq. Dharni | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 7/11/2024 | PF | Cultivation of Fruits crop | Sosokheda Tq. Dharni | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 17/12/2024 | PF | Potato crop production | Sosokheda Tq. Dharni | 01 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| **Agril. Engg.** | | | | | | | | | | | |
| 14/02/2024 | PF | Implements used for organic farming | Sosokheda Tq. Dharni | 1 | 5 | 0 | 5 | 10 | 15 | 25 | 30 |
| 13/03/2024 | PF | Crop Residue Management and use of farm waste for vermicomposting | Sosokheda Tq. Dharni | 1 | 15 | 0 | 15 | 05 | 0 | 05 | 20 |
| 19/4/2024 | PF | Mechanization for ground nut crop | Lavada Tq. Dharni | 1 | 5 | 0 | 5 | 10 | 10 | 20 | 25 |
| 16/5/2024 | PF | Popularization of primary processing machinery for millets | Sosokheda Tq. Dharni | 1 | 5 | 0 | 5 | 15 | 0 | 15 | 20 |
| 12/6/2024 | PF | Sowing by BBF /CRIDA Planter for in situe water conservation | Sosokheda Tq. Dharni | 1 | 5 | 0 | 5 | 10 | 5 | 15 | 20 |
| 24/7/2024 | PF | Post harvest technology | Sosokheda Tq. Dharni | 1 | 5 | 0 | 5 | 15 | 0 | 15 | 20 |
| 7/8/2024 | PF | Water saving techniques | Lavada Tq. Dharni | 1 | 15 | 0 | 15 | 05 | 0 | 05 | 20 |
| 12/9/2024 | PF | Custom hiring centre at village level | Sosokheda Tq. Dharni | 1 | 5 | 0 | 5 | 15 | 5 | 20 | 25 |
| 22/10/2024 | PF | Micro irrigation systems for maize | Sosokheda Tq. Dharni | 1 | 15 | 0 | 15 | 05 | 0 | 05 | 20 |
| **Home Sc.** | | | | | | | | | | | |
| April 24 | PF | Processing and Popularization of Puffs of various millets | Sosokheda | 02 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| May 24 | PF | processing machinery for create various value added product | Chitri | 02 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| July 24 | PF | Drudgery reduction and improving the labour efficiency by using laxmi & vaibhav sickles, maize Sheller etc. | Sonegaon | 02 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| Dec 24 | PF | Low cost techniques of processing on value added product for tribal women | Lawada | 02 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| June 24 | PF | Nutritional supplement for family and income generation through management of Kitchen garden | Kesherpur | 01 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| July 24 | PF | Training on hygiene ,sanitation & food poisoning | Chitri | 01 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| Oct 24 | PF | Use of Soybean mitten for harvesting period | Sonegaon | 01 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| May 24 | PF | Technique of scientific storage of food grains | Sonegaon | 02 | 00 | 05 | 05 | 05 | 15 | 20 | 25 |
| **Plant Protection** | | | | | | | | | | | |
| 28/04/24 | PF | Importance of use of *Trichoderma* for management of diseases in different crops and for composting of agricultural waste | Sosokheda | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 18/05/24 | PF | Importance of seed treatment in pest and disease management in major field crops | Chitri | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 02/06/24 | PF | Strategies for management of Stem fly and girdle beetle in soybean | Sonegaon | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 08/06/24 | PF | Management of wilt disease in Pigeon pea | Lawada | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 06/07/24 | PF | Importance of organic farming and use of important plant protection measures for management of pest and diseases in organic farming. | Kesherpur | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 14/07/24 | PF | Integrated Management of soybean pest and diseases | Chitri | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 10/08/24 | PF | Management of major pest and diseases of Bt.Cotton | Sonegaon | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 17/08/24 | PF | Integrated management of pink bollworm in Bt. Cotton | Sonegaon | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 06/09/24 | PF | Management of pod borer complex in pigeon pea | Sosokheda | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 13/09/24 | PF | Safe handling and safe use of pesticides | Lawada | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 22/09/24 | PF | Management of major pest and diseases of Nagpur mandarin | Chitri | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 04/10/24 | PF | Integrated Pest and Disease management in Bengal gram | Sosokheda | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 17/10/24 | PF | Integrated pest management strategies and its application for major vegetable crops | Sosokheda | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 02/11/24 | PF | Management of major pest and diseases of onion | Chitri | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 16/11/24 | PF | Production of organic inputs for pest and disease management. | Sonegaon | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 07/12/24 | PF | Integrated Pest and Disease management in Brinjal | Lawada | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 20/12/24 | PF | Management of *phytophthora* disease in mandarin | Kesherpur | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| **Agril extension** | | | | | | | | | | | |
| 4/02/24 | PF | Pest & Diseases management in Bengal gram | Sosokheda Tq. Dharni | 01 | 0 | 00 | 02 | 20 | 10 | 30 | 30 |
| 12/04/24 | PF | Group formation for Natural farming | Sosokheda Tq. Dharni | 01 | 11 | 02 | 13 | 06 | 0 | 06 | 19 |
| 12/05/24 | PF | Importance of group formation for processing of millets | Sosokheda Tq. Dharni | 01 | 0 | 02 | 02 | 31 | 00 | 31 | 33 |
| 13/06/24 | PF | Training programme on Natural farming | Sosokheda Tq. Dharni | 01 | 0 | 02 | 02 | 31 | 00 | 31 | 33 |
| 15/07/24 | PF | Entrepreneurship development of farmers through introduction of miner millets | Lavada Tq. Dharni | 01 | 03 | 01 | 04 | 20 | 00 | 20 | 24 |
| 08/08/24 | PF | Motivation of farmers about seed production of Bengal gram | Lavada Tq. Dharni | 01 | 10 | 0 | 10 | 06 | 00 | 06 | 16 |
| 04/10/24 | PF | Entrepreneurship development through marketing of agriculture produce | Lavada Tq. Dharni | 01 | 02 | 01 | 03 | 12 | 00 | 12 | 15 |
| **Animal Science** | | | | | | | | | | | |
| 22/02/2024 | PF | Disease management in backyard poultry | Sosokheda | 1 | 15 | 5 | 20 | 3 | 2 | 5 | 25 |
| 23/02/2024 | PF | Prevention of infant / newborn calf mortality in cattle and buffalo and goat | Chitri | 1 | 15 | 5 | 20 | 2 | 1 | 3 | 23 |
| 19/03/2024 | PF | Preventive measure for parasitic infestation in animals | Sonegaon | 1 | 04 | 02 | 06 | 15 | 4 | 19 | 25 |
| 20/03/2024 | PF | Management of calf after birth | Lawada | 1 | 10 | 5 | 15 | 10 | 5 | 15 | 30 |
| 24/04/2024 | PF | Round the year of green fodder production | Kesherpur | 1 | 05 | 5 | 10 | 10 | 05 | 15 | 25 |
| 15/5/2024 | PF | Preparation of low cost feed for poultry | Chitri | 1 | 20 | 05 | 25 | 2 | 2 | 4 | 29 |
| 11/06/2024 | RY | Importance of probiotic in goat kids for weight gain | Sonegaon | 1 | 18 | 2 | 20 | 5 | 1 | 6 | 26 |
| 023/07/2024 | RY | Importance of deworming and vaccination in large animals | Sonegaon | 1 | 20 | 05 | 25 | 2 | 2 | 4 | 29 |
| 06/08/2024 | RY | Importance of vaccine and deworming in animal | Sosokheda | 1 | 16 | 4 | 20 | 4 | 1 | 5 | 25 |
| 04/09/2024 | RY | Management of calf after birth | Lawada | 1 | 20 | 2 | 22 | 3 | 1 | 4 | 26 |
| 22/10/2024 | RY | Disease management in goat | Chitri | 1 | 20 | 5 | 25 | 1 | 2 | 3 | 28 |
| 19/11/2024 | RY | Management of chicks, grower and layer | Sosokheda | 1 | 20 | 4 | 24 | 3 | 1 | 4 | 28 |

## ii) Vocational training programmes for Rural Youth

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Thematic area** | **Training title\*** | **Venue** | **Month** | **Duration (days)** | **No. of Participants** | | | **SC/ST participants** | | | **G.Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| 07/03/24 | Organic input production | Production of Vermicompost | KVK, Ghatkhed | March 24 | 01 | 25 | 05 | 30 | 10 | 02 | 12 | 30 |
| 24/4/24 | Seed production | Seed Production of Soybean | Sonegaon | April 24 | 01 | 25 | 05 | 30 | 10 | 02 | 12 | 30 |
| 16/4/24 | Biological input production | Production of Biological Input ( Plant extract) | KVK, Ghatkhed | May 24 | 01 | 25 | 05 | 30 | 10 | 02 | 12 | 30 |
| 16/5/24 | Integrated crop Management | Production practices of Milles | Lawada and Sosokheda | April 24 | 01 | 25 | 05 | 30 | 22 | 03 | 25 | 30 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop / Enterprise** | **Identified Thrust Area** | **Training title\*** | **Month** | **Duration (days)** | **No. of Participants** | | | **SC/ST participants** | | | **G. Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| Horticulture | Nursery management of Horticultural crop | Nursery management for fruit crop | June24 | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Horticulture | Protected Cultivation Of Vegetable Crop | Package of  practices for Vegetable crop | Aug24 | 03 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Horticulture | Planting Material Production | Rising of nursery for Ornamental crop | Nov24 | 03 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Horticulture | ICM | Production and Marketing for Flower Crop | Dec24 | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| Organic Farming | Bio-agents production | Low cost technology for production of Bio agents | April 2024 | 02 | 25 | 20 | 45 | 04 | 01 | 05 | 50 |
| Organic & Natural farming | Marketing | Packing and marketing of millets | March 2024 | 01 | 04 | 01 | 05 | 20 | 5 | 25 | 30 |
| Vermicompost | Organic farming | Role of rural youth in Vermiculture production at village level | Aug 24 | 01 | 20 | 05 | 25 | 04 | 01 | 05 | 30 |
| Agriculture Business | Entrepreneurship development | Role of Rural youth in Bio-agents production | Sept  2024 | 01 | 05 | 00 | 05 | 19 | 01 | 20 | 25 |
| Maize | Farm machinery | Care -Maintenance of drip irrigation system | Oct 2024 | 2 | 15 | 0 | 15 | 5 | 0 | 5 | 20 |
| Minor milletes | Small scale processing & value addition | Primary processing machinery for millets | March 2024 | 2 | 15 | 5 | 20 | 5 | 0 | 5 | 25 |
| Production of organic inputs | Small scale income generating enterprise | Low cost technique of production of bio fertilizers at village level | August 24 | 05 | 20 | 05 | 25 | 05 | 03 | 08 | 25 |
| Production of bio control agents and bio pesticides | IPM | Low cost technique of production of Biofungicide–*Trichoderma spp*.at village level | October 24 | 05 | 20 | 05 | 25 | 05 | 03 | 08 | 25 |
| Goat | Promotion of improved goat breed  For heard improvement  Nutritive Management | Goat business management | September-24 | 07 | 10 | 02 | 12 | 6 | 2 | 8 | 20 |
| Japnies Quail | Popularizing newly evolved quail breed | Quail business management | October-24 | 07 | 10 | 03 | 13 | 05 | 02 | 07 | 20 |
| Dairy | Feed Management  Creating awareness on regular deworming, vaccination, and general management | Dairy business management | November-24 | 07 | 12 | 03 | 15 | 3 | 2 | 5 | 20 |
| Poultry | Promotion of improved poultry breeds for rural poultry farming | Poultry business management | December-24 | 07 | 10 | 04 | 14 | 4 | 2 | 6 | 20 |
| Cereal & Pulses | Value added product | Training on income generating activities like vermicelli, puff ,fortified mungvadi papad, making,i etc | Nov 24 | 06 | 00 | 10 | 10 | 00 | 15 | 15 | 25 |
| Value added product | Income generation activity | Preparation of pickles,Jam from fruits &vegetables(aonla mango, Lime, green chilli etc) | Sept 24 | 06 | 00 | 05 | 05 | 00 | 15 | 15 | 20 |
| Mushroom | Income generation activity | Low cost techniques of millets processing on value added product for tribal women | July 24 | 06 | 00 | 15 | 15 | 00 | 10 | 10 | 25 |
| Routs & Tuber | Income generation activity | Processing & value Added Product of Roots & Tuber | April 24 | 06 | 00 | 15 | 15 | 00 | 10 | 10 | 25 |

**iii) Training programme for extension functionaries**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Thematic area** | **Title of the training programme** | **Venue** | **Duration in days** | **No. of participants** | | | **Number of SC/ST** | | | **G. Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| **On Campus** | | | | | | | | | | | |
| 22/04/24 | Soil fertility management | Importance of Soil and Water conservation Practices | KVK, Ghatkhed | 01 | 25 | 05 | 30 | 10 | 05 | 15 | 30 |
| 27/05/24 | Integrated crop Management | Importance and production technology of Millets | KVK, Ghatkhed | 01 | 25 | 05 | 30 | 10 | 05 | 15 | 30 |
| 13/09/24 | Integrated crop Management | Improved Production practices of Bengal gram and Wheat | KVK, Ghatkhed | 01 | 25 | 05 | 30 | 10 | 05 | 15 | 30 |
| 15/6/2024 | Agril assist, Supervisors | Integrated nutrient management of fruit crop | KVK, Ghatkhed | 03 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |
| 24/7/2024 | Agril assist, Supervisors | Vegetable production under Control Condition | KVK, Ghatkhed | 02 | 15 | 05 | 20 | 03 | 02 | 05 | 25 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Clientele** | | **Title of the training programme** | **Duration in days** | **No. of participants** | | | **Number of SC/ST** | | | **G. Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| **On Campus** | | | | | | | | | | | |
| 11/01/24 | EF | Training on Natural & Organic Farming | | 02 | 15 | 02 | 17 | 02 | 01 | 03 | 20 |
| 7/10/24 | EF | Group Dynamics and farmers organization | | 01 | 30 | 20 | 50 | 08 | 02 | 10 | 60 |
| 11/1/24 | EF | Improved implements for organic farming | | 1 | 20 | 10 | 30 | 5 | 5 | 10 | 40 |
| 22/07/24 | EF | Pest and disease management in organic farming | | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 18/08/24 | EF | Management of *phytophthora* disease in mandarin | | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 11/09/24 | EF | Integrated pest management concept for management of pest and diseases in major crops of the district. | | 01 | 14 | 03 | 17 | 06 | 02 | 08 | 25 |
| 25/10/24 | EF | Quail farming as a new business | | 1 | 10 | 05 | 15 | 3 | 2 | 5 | 20 |
| 29/11/24 | EF | Common diseases and its control | | 1 | 10 | 05 | 15 | 3 | 2 | 5 | 20 |
| Sept 24 | EF | Training on Balance Nutritional Thali for Different Age group | | 02 | 00 | 15 | 15 | 00 | 10 | 10 | 25 |
| Nov 24 | EF | Processing of value added product of corn and surgum | | 03 | 00 | 20 | 20 | 00 | 05 | 05 | 25 |
| July 24 | EF | Planning & Management of Nutrition garden through organic methods. | | 02 | 00 | 15 | 15 | 00 | 10 | 10 | 25 |
| Aug 24 | EF | Importance of wild vegetable in daily diet for sustainable health | | 02 | 00 | 20 | 20 | 00 | 05 | 05 | 25 |

**iv) Sponsored Programmes**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Discipline** | **Sponsoring agency** | **Clientele** | **Title of the training programme** | **No. of courses** | **No. of participants** | | | **Number of SC/ST** | | | **G. Total** |
| **M** | **F** | **T** | **M** | **F** | **T** |
| 1. **Sponsored training programme** | | | | | | | | | | | |
| Agri Extension | ATMA | PF | Farmer Scientist Interaction Programme on Natural & Organic farming | Sosokheda Tq. Dharni | 05 | 0 | 05 | 20 | 0 | 20 | 25 |
| Animal Science | ATMA | RY | Scientific goat farming | 01 | 05 | 0 | 05 | 20 | 0 | 20 | 25 |
| Animal Science | ATMA | RY | Scientific Poultry farming | 01 | 05 | 0 | 05 | 20 | 0 | 20 | 25 |
| 1. **Sponsored research programme** | | | | | | | | | | | |
| 1. **Any special programmes** | | | | | | | | | | | |

Annexure - II

**Details of Budget Estimate (2024-25) based on proposed action plan**

|  |  |  |
| --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Proposed**  **BE 2024-25**  **(Rs. In lakh)** |
| **1** | **Recurring Contingencies** |  |
| 1.1 | **Pay & Allowances** | **266.00** |
| 1.2 | **Traveling allowances** | **3.50** |
| 1.3 | **Contingencies** | **30.00** |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) |  |
| *B* | POL, repair of vehicles, tractor and equipments |  |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.150/day/trainee be maintained) |  |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) |  |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) |  |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) |  |
| *G* | Training of extension functionaries |  |
| *H* | Maintenance of buildings |  |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory |  |
| *J* | Library |  |
|  | **TOTAL Recurring Contingencies** | **299.50** |
| **2** | **Non-Recurring Contingencies** |  |
| 2.1 | **Works** | **15.00** |
| 2.2 | **Farm Impliment Equipments including SWTL & Furniture(15+7+5)** | **27.00** |
| 2.3 | **Repaire & Renovation** | **45.00** |
| 2.4 | **Vehicle** (Four-wheeler/Two-wheeler, please specify) | **15.00** |
| 2.4 | **Library** (Purchase of assets like books & journals) | **0.00** |
| 2.5 | **TOTAL Non-Recurring Contingencies** | **102.00** |
| **3** | **REVOLVING FUND** | **0.00** |
|  | **GRAND TOTAL** | **401.50** |