# ICAR-K.H.PATIL KRISHI VIGYAN KENDRA, HULKOTI, GADAG DISTRICT

# ACTION PLAN FOR 2022-23

## 1. General information about the Krishi Vigyan Kendra

| | | | |
|---|---|---|---|
| 1.1 | Name and address of KVK with phone, fax and e-mail ID | : | ICAR-K.H. Patil Krishi Vigyan Kendra<br>Hulkoti – 582205<br>Dist.: Gadag, State: Karnataka<br>Phone : (08372) 289606<br>E-mail : kvk.gadag@icar.gov.in, kvkhulkoti@gmail.com<br>Website: https://kvkgadag.icar.gov.in |
| 1.2 | Name and address of host organization | : | Agricultural Science Foundation<br>Hulkoti – 582205<br>District: Gadag, State: Karnataka<br>Phone : (08372) 289069<br>E-mail : hulkotiasf@gmail.com<br>asf_hulkoti@yahoo.co.in<br>Website: www.asf.ind.in |
| 1.3 | Year of sanction | : | 1985 |
| 1.4 | Website address of KVK and date of last update | | https://kvkgadag.icar.gov.in and date of last update is 02-04-2022 |

## 2. Details of staff as on date

| Sl. No. | Sanctioned post | Name of the incumbent | Discipline |
|---|---|---|---|
| 2.1 | Senior Scientist & Head/PC | Dr. L.G. Hiregoudar | Crop Physiology |
| 2.2 | Subject Matter Specialist | Vacant | Ag. Extension |
| 2.3 | Subject Matter Specialist | Dr. Sudha V. Mankani | Home Science |
| 2.4 | Subject Matter Specialist | Mr. N.H. Bhandi | Soil Science |
| 2.5 | Subject Matter Specialist | Mrs. Hemavati R.H. | Horticulture |
| 2.6 | Subject Matter Specialist | Dr. Gururaj Kombali | Agronomy |
| 2.7 | Subject Matter Specialist | Dr. Vinayaka Niranjan | Agri. Engineering |

| Sl. No. | Sanctioned post | Name of the incumbent | Discipline |
|---|---|---|---|
| 2.8 | Programme Assistant (Animal Science) | Dr. B.M. Murgod | Animal Husbandry |
| 2.9 | Programme Assistant (Computer Programmer) | Mrs. Lalita S.Asuti | Computers |
| 2.10 | Programme Assistant (Farm Manager) | Mr. Suresh L. Halemani | Farm management |
| 2.11 | Assistant | Mr. M.B. Jakkanagoudar | Accounts |
| 2.12 | Stenographer | Mr. T.K. Sai Swaroop Rao | - |
| 2.13 | Driver Cum Mechanic | Mr. N.L. Hadapad | - |
| 2.14 | Driver Cum Mechanic | Mr. G.D. Madivalar | - |
| 2.15 | Skilled Support Staff-1 | Mrs. Savita V. Karadani | - |
| 2.16 | Skilled Support Staff -2 | VACANT | - |

## 3. Details of SAC meeting conducted during 2021-22

| Date | Number of Participants | Salient Recommendations | Action taken | Remarks, if any |
|---|---|---|---|---|
| 04-12-2021 | 18 | Take up trial in Greengram crop with DGGV-7 variety in comparison with DGGV-2 and local China Moong | It will be proposed under OFT during 2022-23 | |
| | | For machine harvesting of Greengram crop, spray Paraquat @ 0.5 ml/litre for shedding of leaves to ease the harvesting operations. Take up this treatment under demonstration. | It will be proposed under FLD / CFLD during Kharif 2022 | |
| | | Conduct trial in Bengalgram crop with DBGV-204 & Digvijaya in comparison with JAKI-9218 and Local Annigeri-1 | It will be proposed under OFT during 2022-23 | |
| | | Advise farmers to practice crop rotation in Bengalgram crop to avoid severe incidence of pest and diseases in succeeding year. | Farmers will be advised to take up crop rotation | |
| | | Conduct demonstrations on nipping with solar operated nipping machine in Chickpea crop | It was carried out in FLDs during Rabi season of 2021-22 | |
| | | Check suitability of Kadari Lepakshi variety in both Kharif and Summer seasons in Gadag district in Groundnut crop | It is taken up during Kharif and Summer season of 2021-22 | |
| | | Conduct demonstration of Groundnut harvester | It will be proposed in Action plan 2022-23 under CFLD / FLD / OFT | |
| | | Demonstrate Splat pheromone trap for Pink Boll worm incidence in Bt. Cotton | It will be proposed in Action plan 2022-23 | |
| | | Take up trial in Onion crop with White Onion (Bheema Shubra) variety in comparison with Red Onion in Kharif season to test the severity of twister disease and the profitability in comparison with Red Onion. | It will be taken-up in KVK farm during Kharif 2022 | |
| | | Conduct demonstrations on Onion powder making and flakes making | It will be carried out during 2022-23 | |
| | | Demonstrate spray of Gokrupamrutha in Chilli crop as one of the best practice | It will be proposed under FLD during 2022-23 | |
| | | Publish literature on dry chilli production technologies in association with Dr.C.M.Rafi, Extension Leader, AEEU, Gadag under UAS, Dharwad | The literature will be published during May 2022. | |
| | | Conduct FFS in fodder crops | It will be proposed in Action Plan during 2022-23 | |
| | | Impart trainings on Integrated animal husbandry activities | It is already being carried out | |

| Date | Number of Participants | Salient Recommendations | Action taken | Remarks, if any |
|---|---|---|---|---|
| | | Provide information and literature pertaining to Integrated Tick Management Technology during trainings. | It is already being carried out | |
| | | Impart trainings on chaff cutting machine and enrichment of dry fodder | It is already being carried out | |
| | | Take service of Scientists / Professors of Veterinary College in KVK adopted villages | Services will be taken for KVK programmes wherever necessary | |
| | | Encourage farmers for participatory seed / fodder slips production | This is already being implemented by KVK through fodder cafeteria | |
| | | Make impact study of Nutri Gardens | Impact study has been carried out and it is included in Annual Report of 2021-22 | |
| | | Encourage farm women to take up seed multiplication under Nutri Garden for succeeding seasons. | This will be carried out during 2022-23 | |
| | | Suggest farmers to take up rejuvenation of old Mango orchards which are non-productive | This will be taken up after the harvest of Mangoes if any farmer consents | |
| | | Conduct demonstration on use of Drone for spraying operations in orchards viz., Mango, Cashewnut etc. | Demonstration on Drone spray was carried out at KVK's Mango and Cashewnut orchards. Service was provided by Garuda, Chennai | |
| | | Demonstrate preparation of BAKAHU products in Hammigi village in Mundaragi block as there are good number of Banana growers | Demonstration on BAKAHU preparation will be carried out during the year 2022-23 | |
| | | Train a group of 5 youths as Coconut Friends Group to help farmers in cleaning / spraying and harvesting of Coconut palms | It will be carried out during June-July 2022 | |

**Tentative date of SAC meeting proposed during 2022-23 : 30-11-2022**

## 4. Details of operational areas proposed during 2022-23

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| **Cluster A**<br>Asundi<br>(Gadag block) | Maize | • Low yield due to cultivation of Maize as a sole crop<br>• Imbalanced nutrition<br>• Incidence of Army worm<br>• Drudgery during threshing and winnowing of Maize<br>• Incidence of Turcicum leaf blight and Bacterial stalk rot<br>• High labour requirement for harvesting of maize | 40 ha.<br>(40% of the irrigated area) | • FLD on ICM practices in Maize<br>• FLD on Maize + Redgram intercropping<br>• Demonstration of self propelled maize harvester<br>• Trainings on ICM practices in maize<br>• Trainings on use of machineries in maize cultivation<br>• Supply of literature<br>• Field day |
| | Greengram | • Low yield due to use of local variety<br>• Low yield due to incidence of Powdery mildew and Pod borer<br>• Seed shattering problem during harvesting in local variety China Moong<br>• Moisture stress due to long dry spells in Kharif | 45 ha<br>(30% of the area) | • OFT of Greengram varieties for higher productivity<br>• FLD on ICM practices in Greengram<br>• FLD on Compartmental Bund Former<br>• Training on ICM in Greengram<br>• Supply of literature<br>• Field day |
| | Spreading Groundnut | • Low productivity in existing local varieties<br>• Imbalanced nutrition<br>• Incidence of leaf minor and leaf spot | 25 ha<br>(20% of the area) | • OFT on improved varieties of spreading groundnut<br>• Trainings on ICM practices in Spreading groundnut<br>• Supply of relevant literature<br>• Field day |
| | Bt. Cotton | • Incidence of Pink bollworm<br>• Incidence of Leaf reddening<br>• Incidence of sucking pests | 15 ha<br>(10% of the area) | • Training on use of Splat pheromone technique to control pink bollworms with method demonstration<br>• Training on ICM practices in cotton<br>• Field day |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Bengal gram | • Low yield due to cultivation of local varieties<br>• Low yield due to incidence of pod borer<br>• Incidence of Wilt and Rust | 40 ha<br>(40% of the area) | • FLD on ICM practices in Bengalgram<br>• Training on ICM practices in Bengalgram<br>• Supply of literature<br>• Field day |
| | | • Low yields due to moisture stress | | • FLD on solar nipping machine<br>• FLD on compartmental bund former<br>• Trainings on use of machineries in chickpea cultivation<br>• Field day |
| | Rabi Sorghum | • Low productivity due to use of local variety<br>• Incidence of shoot fly and stem borer<br>• Incidence of smut diseases<br>• Problem of lodging in existing variety | 40 ha<br>(20 % of the area) | • FLD on ICM practices in Rabi Sorghum<br>• Training on ICM practices in Rabi Sorghum<br>• Supply of literature<br>• Field day |
| | Summer groundnut operation | • Low yield due to use of local varieties<br>• Incidence of collar rot and root grub | 50 ha<br>(50% of the irrigated area) | • FLD on ICM in Summer Groundnut<br>• Training on ICM practices in summer groundnut<br>• Field Day<br>• Supply of literature |
| | | • Drudgery of in manual harvesting<br>• Low income due to high labour cost | | • OFT on mechanical harvesting of summer groundnut<br>• Trainings on use of machineries in groundnut cultivation |
| | Vegetable crops | • Low income due to cultivation of local varieties<br>• Application of imbalanced fertilizers | 36 ha. (60% of the irrigated area) | • FLD on Vegetable Cafeteria ( Ridgegourd, Radish, Spinach and Dolichos Bean)<br>• Assessment of high yielding okra hybrids for higher productivity<br>• Trainings on ICM in vegetable crops<br>• Supply of literature<br>• Field day |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Red Chilli | • Non-availability of quality and pure seeds of Byadgi Dabbi<br>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases<br>• Improper post-harvest management (Drying & storage of chilli and its powder) | 250 ha. (60% of the rainfed area) | • FLD on ICM in Chilli crop<br>• FLD on drying of Red chillies in Solar Drier<br>• Assessment of Shelf Life of Chilli powder<br>• Assessment of packaging methods for chilli powder storage<br>• Training on ICM<br>• Supply of relevant literature<br>• Farm advisory services<br>• Rendering Kisan Mobile Advisory Services to farmers<br>• Field day<br>• Seed production |
| | Onion | • Imbalanced nutrition application without soil testing<br>• Low productivity in existing variety Bellary Red onion<br>• Low keeping quality of bulbs in existing variety<br>• High incidence of thrips & purple blotch<br>• High incidence of weeds<br>• High labour requirement in detopping of harvested onion crop | 250 ha. (60% of the rainfed area) | • FLD on introduction of Bhima Super variety along with ICM practices<br>• Trainings on ICM in onion crop<br>• Seed production activities with identified seed farmers for supply of quality seeds of Bhima Super variety in village<br>• Supply of relevant literature<br>• Field day |
| | Banana | • Less market price<br>• No value addition | 4 ha. | • Training on Bakaahu products |
| | Milch cattle | • Low productivity of milk due to non-availability of green fodder throughout the year. | 120 Nos. | • FLD on fodder cafeteria and nutrition in milch cattle<br>• Training on scientific management of milch cattle<br>• Supply of literature<br>• Field visit<br>• Mobile advisory services<br>• Field day |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | | | | • Animal health camps in collaboration with Department of Animal Husbandry |
| | Nutrition and health | • Less consumption of fruits and vegetables | 85% families | • FLD on Nutri Garden<br>• Training on balanced diet and nutrition<br>• Training on importance of millets in diet<br>• Field day |
| | PHT in Chilli | • Unhygienic way of drying of Red Chillies | 80 % families | • FLD on solar drying of Red Chillies<br>• Training on use of solar dryer for drying of chillies |
| | Grain storage | • Incidence of stored grain pest | 50% families | • FLD on demonstration of Super grain bags<br>• Training on management of stored grain pests<br>• Home visits and interactive meetings<br>• Supply of literature<br>• Supply of super grain bags |
| | Drudgery | • Drudgery in cleaning & grading of grains<br>• Less market price due to non-grading of grains | 80% families | • Demonstration on spiral separator on Greengram, Bengalgram, Rabi Sorghum etc.<br>• UV protected aprons for farm activities |
| | Organic input production | • Lack of awareness on importance of organic inputs among farm women | 70% families | • Training<br>• Supply of literature |
| | Borewell | • Decreased ground water level and less water availability for irrigation | 160 ha. (37%) | • Training on recharge of ground water through borewell<br>• Field visits to demonstration units of artificial recharge of ground water through borewell<br>• Supply of literature |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| **Cluster B**<br>Halligudi<br>(Mundaragi block) | Greengram | • Low yield due to use of local varieties<br>• Incidence of Leaf spot and Powdery mildew<br>• Incidence of Yellow Mosaic Virus and Leaf spot<br>• Moisture stress due to long dry spells in Kharif | 150 ha<br>(25 % of the area) | • FLD on ICM practices in Greengram<br>• Training on ICM practices in Greengram<br>• FLD on Compartmental Bund Former<br>• Supply of literature<br>• Field day |
| | Bengalgram | • Low yield due to cultivation of local varieties<br>• Low yield due to incidence of pod borer<br>• Incidence of Wilt and Rust | 200 ha<br>(40 % of the area) | • FLD on ICM practices in Bengalgram<br>• Training on ICM practices in Bengalgram<br>• Field day<br>• Supply of literature |
| | | • Reduced yield due to moisture stress | | • FLD on compartmental bund former<br>• FLD on solar nipping machine<br>• Trainings on use of machineries in chickpea cultivation |
| | Safflower | • Low productivity due to cultivation of local variety<br>• Incidence of sucking pests<br>• Incidence of Capsule borer<br>• Incidence of Alternaria leaf spot | 100 ha<br>(50 % of the area) | • OFT on Assessment of Annigeri 2020 and ISF-764 varieties in Safflower crop<br>• Training on ICM practices in Safflower<br>• Supply of literature<br>• Field Day |
| | Rabi Sorghum | • Low productivity due to use of local variety<br>• Incidence of shoot fly and stem borer<br>• Incidence of smut diseases<br>• Problem of lodging in existing variety | 40 ha<br>(20 % of the area) | • FLD on ICM practices in Rabi Sorghum<br>• Training on ICM practices in Rabi Sorghum<br>• Supply of literature<br>• Field day |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Nutri cereal Foxtail millet | • Low productivity in existing local variety | 5 ha | • FLD on ICM practices in Nutri cereal Foxtail millet variety DHFt-109-3<br>• Trainings<br>• Supply of literature & Field day |
| | Bio-fortified Pearl millet | • Long dry spells result in low yields in majority of the Kharif crops, hence introducing bio-fortified and drought resistant pearl millet | - | • FLD on ICM practices in bio-fortified Pearl millet variety VPMV-9<br>• Organoleptic evaluation of Roti<br>• Analysis of Zinc and Iron in the flour<br>• Trainings<br>• Supply of literature & Field day |
| | Sunflower | • Incidence of Necrosis<br>• Incidence of Red headed caterpillar (RHHC) | 20 ha<br>(50 % of the area) | • Training on ICM practices in Sunflower<br>• Supply of literature |
| | Red Chilli | • Non-availability of quality and pure seeds of Byadgi Dabbi<br>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases | 80 ha. (30% of the rainfed area) | • FLD on ICM in Chilli crop<br>• Training on ICM<br>• Supply of relevant literature<br>• Farm advisory services<br>• Rendering Kisan Mobile Advisory Services to farmers<br>• Field day |
| | Onion | • Low income due to cultivation of local varieties<br>• Imbalanced nutrition without soil testing<br>• Low keeping quality bulbs in existing variety<br>• High incidence of thrips & purple blotch<br>• High incidence of weeds<br>• High labour requirement in detopping of harvested onion crop | 100 ha. (30% of the rainfed area) | • FLD on introduction of Bhima Super variety along with ICM practices<br>• Trainings on ICM in onion crop<br>• Demonstration of battery operated detopper<br>• Trainings on use of battery operated detopper<br>• Seed production activities with identified seed farmers<br>• Supply of quality seeds of Bhima Super variety<br>• Supply of relevant literature<br>• Field day |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Rabi crops | • Non profitability in existing Rabi crops due to moisture stress during Rabi Season | 80 ha (25% of the rainfed area) | • FLD on introduction of Ashwagandha crop for higher income and drought mitigation<br>• Supply of relevant literature<br>• Field day |
| | Rabi crops | • Non profitability in existing Rabi crops due to moisture stress during Rabi Season | 80 ha (25% of the rainfed area) | • FLD on introduction of Ajawain crop for higher income and drought mitigation<br>• Supply of relevant literature<br>• Field day |
| | Milch cattle | • Low productivity of milk due to non-availability of green fodder throughout the year. | 25 Nos. | • Training on scientific management of milch cattle<br>• Supply of literature<br>• Mobile advisory services |
| | Sheep | • Low body weight in lambs | 500 Nos. | • Training on scientific management of sheep |
| | Goat | • Low body weight in kids | 50 Nos. | • Training on scientific management of goats |
| | Nutrition and health | • Less consumption of fruits and vegetables | 85% families | • FLD on Nutri Garden<br>• Training on balanced diet and nutrition<br>• Training on healthy foods for healthy life<br>• Training on importance of millets in diet<br>• Field day |
| | Grain storage | • Incidence of stored grain pest | 50% families | • FLD on demonstration of Super grain bags<br>• Training on management of stored grain pests<br>• Home visits and interactive meetings<br>• Supply of literature<br>• Supply of super grain bags |
| | Drudgery | • Drudgery in cleaning & grading of grains<br>• Less market price due to non-grading of grains | 80% families | • Demonstration on spiral separator on Greengram, Bengalgram, Rabi Sorghum etc.<br>• UV protected aprons for farm activities |
| | Organic input production | • Lack of awareness on importance of organic inputs among farm women | 70% families | • Training<br>• Supply of literature |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| **Cluster C** Akkigund (Laxmeshwar block) | Maize | • Low yield due to cultivation of Maize as a sole crop<br>• Imbalanced nutrition<br>• Incidence of Army worm<br>• Drudgery during threshing and winnowing of Maize<br>• Incidence of Turcicum leaf blight and Bacterial stalk rot<br>• High labour requirement for harvesting of maize | 60 ha (90 % of total area) | • FLD on ICM practices in Maize<br>• FLD on Maize + Redgram intercropping<br>• Demonstration of self propelled maize harvester<br>• Trainings on ICM practices in maize<br>• Trainings on use of machineries in maize cultivation<br>• Supply of literature<br>• Field day |
| | Spreading groundnut | • Low productivity in existing local varieties<br>• Imbalanced nutrition<br>• Incidence of leaf minor and leaf spot | 40 ha (20 % of the area) | • OFT on improved varieties of spreading groundnut<br>• Trainings on ICM practices in Spreading groundnut<br>• Supply of relevant literature |
| | Bt. Cotton | • Incidence of pink bollworm<br>• Problem of leaf reddening<br>• Incidence of sucking pests | 40 ha (20 % of the area) | • Training on use of Splat pheromone technique to control pink bollworm and method demonstration<br>• Training on ICM practices in cotton |
| | | • Drudgery of operation in existing spraying methods | 120 ha (80 % of total area) | • OFT on assessment of different spraying equipment<br>• Trainings on use of machineries in Bt. Cotton cultivation |
| | Greengram | • Low yield due to use of local varieties<br>• Incidence of Powdery mildew<br>• Incidence of Yellow Mosaic Virus and Leaf spot | 80 ha (50 % of the area) | • FLD on ICM practices in Greengram<br>• Training on ICM practices in Greengram<br>• Supply of literature<br>• Field day |
| | Blackgram | • Low yield due to use of local varieties<br>• Incidence of Powdery mildew<br>• Incidence of pod borer | 30 ha (20 % of the area) | • OFT of high yielding varieties of Blackgram<br>• Training on ICM practices in Blackgram<br>• Supply of literature |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Bengalgram | • Low yield due to cultivation of local varieties<br>• Low yield due to incidence of pod borer<br>• Incidence of Wilt and Rust | 100 ha<br>(25 % of the area) | • OFT on assessment of high yielding varieties<br>• FLD on ICM practices in Bengalgram<br>• Training on ICM practices in Bengalgram<br>• Field day<br>• Supply of literature |
| | Wheat | • Low productivity due to use of local varieties<br>• Incidence of termites and stem borer<br>• Incidence of rust and leaf spot | 20 ha<br>(10 % of the area) | • Training on ICM practices in Wheat<br>• Supply of literature |
| | Rabi Sorghum | • Incidence of Shoot fly and Stem borer<br>• Incidence of Smut disease | 20 ha<br>(20 % of the area) | • FLD on ICM practices in Rabi Sorghum<br>• Training on ICM practices in Rabi Sorghum<br>• Supply of literature<br>• Field day |
| | Nutri cereal Foxtail millet | • Low productivity in existing local variety | 5 ha | • FLD on ICM practices in Nutri cereal Foxtail millet variety DHFt-109-3<br>• Trainings<br>• Supply of literature & Field day |
| | Rabi crops | • Non profitability in existing farming system due to moisture stress during Rabi season | 90 ha (40% of the rainfed area) | • FLD on introduction of Ashwagandha crop for higher income and drought mitigation<br>• Supply of relevant literature |
| | Borewell | • Decreased ground water level and less water availability for irrigation | 35 ha. (25%) | • Training on recharge of ground water through borewell<br>• Field visits to demonstration units of artificial recharge of ground water through borewell<br>• Supply of literature |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Milch cattle | • Low productivity of milk due to non-availability of green fodder throughout the year. | 75 Nos. | • FLD on fodder cafeteria and nutrition in milch cattle<br>• Training on scientific management of milch cattle<br>• Supply of literature<br>• Field visit<br>• Mobile advisory services<br>• Field day<br>• Animal health camps in collaboration with Department of Animal Husbandry |
| | Goat | • Low body weight in kids | 200 Nos. | • Training on scientific management of goats |
| | Nutrition and health | • Less consumption of fruits and vegetables | 85% families | • FLD on Nutri Garden<br>• Training on balanced diet and nutrition<br>• Training on healthy foods for healthy life<br>• Training on importance of millets in diet<br>• Field day |
| | Grain storage | • Incidence of stored grain pest | 50% families | • FLD on demonstration of Super grain bags<br>• Training on management of stored grain pests<br>• Home visits and interactive meetings<br>• Supply of literature<br>• Supply of super grain bags |
| | Drudgery | • Drudgery in cleaning & grading of grains<br>• Less market price due to non-grading of grains | 80% families | • Demonstration on spiral separator on Greengram, Bengalgram, Rabi Sorghum etc.<br>• UV protected aprons for farm activities |
| | Organic input production | • Lack of awareness on importance of organic inputs among farm women | 70% families | • Training<br>• Supply of literature<br>• Field day |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| **Cluster D**<br>Muganur<br>(Naragund block) | Maize | • Low productivity due to imbalanced nutrition<br>• Incidence of Armyworm<br>• Problem of leaf reddening<br>• Incidence of Downey mildew | 150 ha<br>(30 % of the area) | • FLD on ICM practices in Maize<br>• Training on ICM practices in maize<br>• Supply of literature<br>• Field day |
| | Greengram | • Low yield due to use of local varieties<br>• Incidence of Powdery mildew<br>• Incidence of Yellow Mosaic Virus and Leaf spot | 100 ha<br>(50 % of the area) | • FLD on ICM practices in Greengram<br>• Training on ICM practices in Greengram<br>• Supply of literature<br>• Field day |
| | Blackgram | • Low yield due to use of local varieties<br>• Incidence of Powdery mildew<br>• Incidence of pod borer | 20 ha<br>(20 % of the area) | • OFT on high yielding varieties of Blackgram<br>• Training on ICM practices in Blackgram<br>• Supply of literature |
| | Wheat | • Low productivity due to use of local varieties<br>• Incidence of stem borer<br>• Incidence of rust and leaf spot | 40 ha<br>(20 % of the area) | • Training on ICM practices in wheat<br>• Supply of literature |
| | Bengalgram | • Low yield due to cultivation of local varieties<br>• Low yield due to incidence of pod borer<br>• Incidence of Wilt and Rust<br>• Non profitability in existing farming system due to moisture stress<br>• Deterioration of soil physical properties due to unscientific use of machineries<br>• Reduced Water Use Efficiency | 50 ha<br>(40 % of the area) | • OFT on assessment of high yielding varieties in Bengalgram crop<br>• OFT on conservation agriculture practices<br>• FLD on ICM practices in Bengalgram<br>• FLD on Solar nipping machine<br>• Training on ICM practices in Bengalgram<br>• Field day<br>• Supply of literature |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Rabi Sorghum | • Incidence of Shoot fly and Stem borer<br>• Incidence of Smut disease | 25 ha<br>(40 % of the area) | • FLD on ICM practices in Rabi Sorghum<br>• Training on ICM practices in Rabi Sorghum<br>• Supply of literature<br>• Field day |
| | Safflower | • Low productivity due to cultivation of local variety<br>• Incidence of sucking pests<br>• Incidence of Capsule borer<br>• Incidence of Alternaria leaf spot | 50 ha<br>(50 % of the area) | • OFT on Assessment of Annigeri 2020 and ISF-764 varieties in Safflower crop<br>• Training on ICM practices in Safflower<br>• Supply of literature<br>• Field Day |
| | Red Chilli | • Non-availability of quality and pure seeds of Byadgi Dabbi<br>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases<br>• Unhygienic way of drying of Red Chillies | 120 ha (30% of the rainfed area) | • FLD on ICM in Chilli crop<br>• FLD on solar drying of Red Chillies<br>• Training on use of solar dryer for drying of chillies<br>• Training on ICM<br>• Supply of relevant literature<br>• Farm advisory services<br>• Field day<br>• Seed production activities with identified seed farmers |
| | Onion | • Low productivity due to imbalanced nutrition<br>• Low productivity due to cultivation of low yielding variety Double Red<br>• Incidence of thrips reduces the yields | 120 ha (30% of the rainfed area) | • FLD on introduction of Bhima Super variety along with ICM practices<br>• Trainings on ICM in onion crop<br>• Seed production activities with identified seed farmers<br>• Supply of quality seeds of Bhima Super variety<br>• Supply of relevant literature & Field day |
| | Milch cattle | • Low productivity of milk due to non-availability of green fodder throughout the year. | 45 Nos. | • Training on scientific management of milch cattle<br>• Supply of literature<br>• Mobile advisory services |

| Clusters | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise that limit yield and income | Extent of area (ha/No.) affected by the problem in the village | Proposed intervention (OFT, FLD, Training, extension activity etc.)* |
|---|---|---|---|---|
| | Drudgery | • Drudgery in cleaning & grading of grains<br>• Less market price due to non-grading of grains | 80% families | • Demonstration on spiral separator on Greengram, Bengalgram, Rabi Sorghum etc.<br>• UV protected aprons for farm activities |
| | Nutrition and health | • Less consumption of millets, fruits and vegetables in daily diet | 85% families | • FLD on Nutri Garden<br>• Training on health and nutrition, importance of millets in diet<br>• Field day |
| | Grain storage | • Incidence of stored grain pest | 50% families | • FLD on demonstration of Super grain bags<br>• Training on management of stored grain pests<br>• Home visits and interactive meetings<br>• Supply of literature<br>• Supply of super grain bags |
| | Dicoccum wheat | • Nutritional importance and its value addition | 50% families | • Training on nutritional importance and its value addition |

## 5. Technology assessment during 2022-23

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.1 | Greengram | • Low productivity due to cultivation of local variety | Assessment of high yielding varieties of Greengram | *Farmers Practice:* Shining Moong | | | | | 3 | **3000** | • Yield (Qtl/ha)<br>• Plant height (cm)<br>• No. of pods per plant | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1:* DGGV-2 | UAS, Dharwad | Seeds (DGGV-2) | 5 Kg | 500 | | | | |
| | | | | *Technology Option 2:* DGGV-7 | UAS, Dharwad | Seeds (DGGV-7) | 5 Kg | 500 | | | | |
| | | | | | | | **Total** | **1000** | | | | |
| 5.2 | Bengalgram | • Productivity of JAKI-9218 variety is low<br>• Problem of wilt in this vareity | Assessment of production potential of different Bengalgram varieties | *Farmers Practice:* JG-11 | - | - | - | - | 5 | **40400** | • Plant height (cm)<br>• No. of pods per plant<br>• Test weight (g)<br>• Grain yield (q/ha)<br>• Duration of crop (Days)<br>• Incidence of wilt (%)<br>• Incidence of rust (%) | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1:* JAKI-9218 | UAS, Dharwad | Seeds (JAKI-9218) | 20 Kg | 2000 | | | | |
| | | | | *Technology Option 2:* DBGV-204 | UAS, Dharwad | Seeds (DBGV-204) | 20 Kg | 2000 | | | | |
| | | | | *Technology Option 3:* NBeG-49 | PJTSAU, Hyderabad | Seeds (NBeG-49) | 20 Kg | 2000 | | | | |
| | | | | *Technology Option 4:* Phule Vikram | MPKV, Rahuri | Seeds (Phule vikram) | 20 Kg | 2000 | | | | |
| | | | | | | **Other inputs** | | | | | | |
| | | | | | | Rhizobium | 200 gm | 40 | | | | |
| | | | | | | PSB | 200 gm | 40 | | | | |
| | | | | | | | **Total** | **8080** | | | | |

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.3 | Bengalgram | • Non profitability due to moisture stress<br>• Deterioration of soil physical properties due to repeated use of machineries especially Rotavators<br>• Reduced water application efficiency | Assessment of conservation agriculture practice for higher productivity in Chickpea preceded with Maize crop | *Farmers' Practice*<br>Sowing of chickpea following conventional tillage after Maize crop harvest (Clean field after 2 times Rotavator operation) | | | | | 3 | **23700** | •Yield (Qtl/ha)<br>•Soil Moisture Content (%)<br>• Soil Bulk Density (kg/cm$^3$)<br>• Economics | SMS (Ag. Engg.) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1*<br>Direct sowing of chickpea in standing stubbles after combined harvester operation (Previous crop: Maize) | PAU, Ludhiana | Seeds (JAKI 9218) | 10 Kg | 1000 | | | | |
| | | | | | | Chickpea magic | 1 Kg | 300 | | | | |
| | | | | | | Seed cum fertilizer drill (Hiring basis) | 2 hours | 1800 | | | | |
| | | | | | | Pre-emergence Herbicide (Pendimethalin) | 1 litre | 350 | | | | |
| | | | | | | Post-emergence Herbicide (Imazethypyr) | 0.5 litre | 500 | | | | |
| | | | | *Technology Option 2*<br>Direct sowing of chickpea in cut and | PAU, Ludhiana | Seeds (JAKI 9218) | 10 Kg | 1000 | | | | |
| | | | | | | Chickpea magic | 1 Kg | 300 | | | | |
| | | | | | | Seed cum fertilizer drill (Hiring basis) | 2 hours | 1800 | | | | |

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | spread Maize crop residue resulted through harvesting by single row self propelled Maize harvester (Previous crop: Maize) | | Pre-emergence Herbicide (Pendimethalin) | 1 litre | 350 | | | | |
| | | | | | | Post-emergence Herbicide (Imazethypyr) | 0.5 litre | 500 | | | | |
| | | | | | | | **Total** | **7900** | | | | |
| 5.4 | Blackgram | Low productivity due to cultivation of local variety | Assessment of Production potential of different Blackgram varieties under rainfed condition | *Farmers practice:* Local variety | - | - | - | - | 5 | **14150** | • Plant height (cm)<br>• No. of pods per plant<br>• Test weight (g)<br>• Grain yield (q/ha)<br>• Incidence of powdery mildew (%) | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1:* DBGV-5 | UAS. Dharwad | Seeds (DBGV-5) | 7 kg | 1000 | | | | |
| | | | | *Technology Option 2:* BDU-12 | UAS, Raichur | Seeds (BDU-12) | 7 kg | 1750 | | | | |
| | | | | | | **Other inputs** | | | | | | |
| | | | | | | Rhizobium | 200g | 40 | | | | |
| | | | | | | PSB | 200g | 40 | | | | |
| | | | | | | | **Total** | **2830** | | | | |

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.5 | Spreading Groundnut | Productivity of existing local varieties is very less under rainfed condition | Assessment of Spreading Groundnut varieties for higher productivity | *Farmers Practice:* Maradur local variety | - | - | - | - | 3 (Each trial 0.2 ha ) | **25290** | • Pod Yield (q/ha)<br>• Number of pods per plant<br>• Duration (Days)<br>• Incidence of leaf spot (%)<br>• Quantity of hay | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1:* DSG-1 | UAS, Dharwad | Pods (DSG-1) | 30 Kg | 2130 | | | | |
| | | | | *Technology Option 2:* GJG-18 | JAU, Gujarat | Pods (GJG-18) | 30 Kg | 6300 | | | | |
| | | | | | | | **Total** | **8430** | | | | |
| 5.6 | Summer Groundnut | • Drudgery involved in manual harvesting<br>• Higher percentage of pod damage in digging by tractor drawn blade harrow<br>• Soil adhering to the pods after harvesting requires beating by | Assessment of Mechanical Harvesting of Summer Groundnut for Higher Productivity | *Farmers Practice:* Harvesting of Groundnut crop by manual labour | - | - | **-** | **-** | **3** | **6600** | • Digging Efficiency (%)<br>• Pod damage (%)<br>• Labour requirement (Man-h/ha)<br>• Economics | SMS (Ag. Engg.) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1:* Harvesting of Groundnut crop by Tractor Drawn Blade Harrow | UAS, Raichur | Tractor Drawn Blade Harrow (Hiring basis) | **1 h** | **1000** | | | | |

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | hands to separate the soil | | *Technology Option 2:* Harvesting of Groundnut crop by Tractor Operated Groundnut Digger cum Elevator | TNAU, Coimbatore | Tractor Operated Groundnut Digger cum Elevator (Hiring basis) | **1 h** | **1200** | | | | |
| | | | | | | | **Total** | **2200** | | | | |
| 5.7 | Safflower | Low productivity due to cultivation of local variety | Assessment of different Safflower varieties for their productivity under rainfed condition | *Farmers Practice:* A-1 | - | - | - | - | 5 | **3500** | • Plant height (cm)<br>• No. of branches per plant<br>• No. of capsules per plant<br>• Duration (Days)<br>• Yield (q/ha)<br>• Incidence of leaf spot (%) | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1:* A-2020 | UAS, Dharwad | Seeds (A-2020) | 3.5 Kg | 350 | | | | |
| | | | | *Technology Option 2:* ISF-764 | ICAR-IIOR, Hyderabad | Seeds (ISF-764) | 3.5 Kg | 350 | | | | |
| | | | | | | | **Total** | **700** | | | | |

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.8 | Bt. Cotton | • Incidence of pests especially white flies and thrips<br>• Incidence of disease especially Angular leaf spot<br>• Drudgery of operation in existing spraying methods | Assessment of different spraying equipment for effective pest management | *Farmers' Practice* Spraying by Battery operated sprayer | | | | | 3 | **12150** | •Application Rate (l/ha)<br>•Labour requirement (man-h/ha)<br>•Area coverage (ha/h)<br>•Bio efficacy of spray (%)<br>• Economics | SMS (Ag. Engineering) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1* Tractor Operated Boom Sprayer | UAS, Raichur | Pesticide chemical (Spinetoram) | 100 ml | 1150 | | | | |
| | | | | | | Fungicide chemical (Mancozeb) | 500 g | 600 | | | | |
| | | | | | | Tractor Operated Boom Sprayer | 1 hour | 150 | | | | |
| | | | | *Technology Option 2* Drone mounted sprayer | UAS, Raichur | Pesticide chemical (Spinetoram) | 100 ml | 1150 | | | | |
| | | | | | | Fungicide chemical (Mancozeb) | 500 g | 600 | | | | |
| | | | | | | Drone mounted sprayer (Hiring basis) | 0.5 hour | 400 | | | | |
| | | | | | | | **Total** | **4050** | | | | |

| Sl. No. | Crop/ enterprise | Prioritized problem | Title of intervention | Technology options | Source of technology | Name of critical input | Qty per trial (q) | Cost per trial (Rs.) | No. of trials | Total cost (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.10 | Okra | Existing hybrids are low yielding and resulting in low income | Assessment of high yielding okra hybrids for higher productivity | *Farmers' Practice* Cultivation of private hybrids | | | | | 3 | **16200** | •Yield (Qtl/ha) and economics<br>•PDI (%)<br>•Plant height & Duration of the crop | SMS (Horticulture) & SMS (Ag. Extn.) |
| | | | | *Technology Option 1* CoBH-4 | TNAU, Tamilnadu | Seeds: CoBH-4 | 1 Kg | 2500 | | | | |
| | | | | | | Arka vegetable Special | 1Kg | 200 | | | | |
| | | | | *Technology Option 2* Arka Nikita | ICAR-IIHR, Bengaluru | Seeds : Arka Nikita | 1 Kg | 2500 | | | | |
| | | | | | | Arka Vegetable Special | 1Kg | 200 | | | | |
| | | | | | | | **Total** | **5400** | | | | |
| | | | | | | | | **Total of OFTs** | **33** | **144990** | | |

## 6. Frontline demonstrations during 2022-23

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.1 | Cereals | Rabi Sorghum | • Low productivity in existing M 35-1 variety<br>• Moisture stress | Demonstration of SPV-2217 variety in Rabi Sorghum crop | SPV-2217 | - | UAS, Dharwad | Seeds (SPV-2217) | 3 Kg | 180 | 40 | **8000** | •Yield (Qtl/ha)<br>•% of lodging<br>•Organoleptic evaluation | SMS (Agronomy), SMS (Home Science) & SMS (Ag. Extn.) |
| | | | | | | | | $CaCl_2$ | 100 gm | 20 | | | | |
| | | | | | | | | **Total** | | **200** | | | | |
| | | Maize | • Low soil fertility<br>• Imbalanced nutrition<br>• Incidence of fall army worm<br>• Incidence of turcicum leaf blight | Demonstration of ICM practices in Maize | - | CP8 48/ CP8 18 | UAS, Dharwad | Soil test based nutrient application | - | - | 20 | **20000** | • Yield (kg/ha)<br>• No. of grains per cob<br>• Test weight g) | SMS (Soil Science) & SMS (Ag. Extn.) |
| | | | | | | | | $ZnSO_4$ | 5 Kg | 500 | | | | |
| | | | | | | | | $FeSO_4$ | 10 Kg | 500 | | | | |
| | | | | | | | | | **Total** | **1000** | | | | |
| | | | • Drudgery of operation involved in manual cob harvesting<br>• High labour requirement and cost | Self propelled maize harvester | - | - | Kissan Kraft | Self propelled maize harvester (Hiring basis) | 3 hours | 600 | 3 | **5400** | • Area coverage (ha/h)<br>• Cob damage (%)<br>• Labour requirement (man-h/ha) | SMS (Ag. Engg.) & SMS (Ag. Extn.) |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | of operation for harvesting of maize crop | | | | | | | | | | | |
| | | Maize + Redgram | Monocropping of Maize is risky due to vagaries of monsoon rains | Demonstration of Maize + Redgram intercropping | TS-3R | CP848/ CP818 | UAS, Dharwad | Seeds (TS-3R) | 3 Kg | 300 | 6 | **8538** | • Yield (Qtl/ha)<br>• Seed weight<br>• CEY | SMS (Soil Science), SMS (Agronomy) & SMS (Ag.Extn.) |
| | | | | | | | | $CaCl_2$ @ 2% | 100 gm | 20 | | | | |
| | | | | | | | | Rhizobium | 200 gm | 25 | | | | |
| | | | | | | | | PSB | 200 gm | 25 | | | | |
| | | | | | | | | Trichoderma | 50 gm | 10 | | | | |
| | | | | | | | | Pulse magic | 2 Kg | 575 | | | | |
| | | | | | | | | Yellow sticky traps | 8 Nos. | 468 | | | | |
| | | | | | | | | | **Total** | **1423** | | | | |
| 6.2 | Millets | Foxtail millet | • Low productivity in existing local seeds<br>• Non-availability of quality and pure seeds of improved varieties | Demonstration of nutria cereal crop foxtail millet with high yielding variety | - | DHFt-109-3 | UAS, Dharwad | Seeds | 3 kg | 300 | 25 | **7500** | • Plant height (cm)<br>• No. of tillers per plant<br>• Grain yield (q/ha)<br>• Organoleptic evaluation | SMS (Agronomy), SMS (Home Science) & SMS (Ag. Extn.) |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |
| | | Pearl millet | • Long dry spells result in low yields in majority of the Kharif crops | Introduction of bio-fortified and drought resistant pearl millet | VPMV-9 | - | UAS, Dharwad | Seeds | 2 Kg | 300 | 3 | **3540** | • Yield (Qtl/ha)<br>• Zn and Fe content (mg)<br>• Organoleptic evaluation of Roti<br>• Stickiness of flour<br>• Shelf life of Roti and flour | SMS (Agronomy), SMS (Home Science) & SMS (Ag. Extn.) |
| | | | | | | | | Azospirillum | 200 gm | 40 | | | | |
| | | | | | | | | PSB | 200 gm | 40 | | | | |
| | | | | | | | | Analysis of Zinc and Iron | - | 800 | | | | |
| | | | | | | | | **Total** | | **1180** | | | | |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.3 | Oilseeds | Safflower | • Low productivity due to cultivation of local variety<br>• Imbalanced nutrition<br>• Incidence of sucking pests<br>• Incidence of Capsule borer<br>• Incidence of Leaf spot | Demonstration of ICM practices in high yielding ISF-764 variety of Safflower | ISF-764 | - | ICAR-IIOR, Hyderabad | Seeds (ISF-764) | 3.5 kg | 350 | 25 | **8750** | • No. of capsules per plant<br>• Duration (Days)<br>• Yield (q/ha)<br>• Incidence of leaf spot (%) | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | | | | | **Total** | | **350** | | | | |
| | | Summer Groundnut | • Low yield due to use of local varieties<br>• Incidence of collar rot and root grub | •ICM in Kadari Lepakshi variety of Summer Groundnut | Kadari Lepakshi | - | PJTSAU, Hyderabad | Seeds (Kadari Lepakshi) | 60 Kg | 6000 | 3 | **18000** | • Yield (Qtl/ha)<br>• No. of pods/plant (Nos.)<br>• Collar rot incidence (%) | SMS (Agronomy) & SMS (Ag. Extn.) |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.4 | Pulses | Greengram | • Low yield due to cultivation of local varieties<br>• Incidence of Yellow Mosaic Virus and Pod borer<br>• Incidence of Powdery mildew<br>• Seed shattering problem during harvesting<br>• Moisture Stress | Demonstration of DGGV-2 variety in Greengram crop and easy facilitation of machine harvesting by shedding leaves at harvest through spray of Paraquat herbicide | DGGV-2 | - | UAS, Dharwad | Seeds (DGGV-2) | 5 Kg | 500 | 25 | | • Plant height (cm)<br>• No. of pods per plant<br>• Yield (q/ha)<br>• Incidence of rust (%) | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | | | | | PSB | 200 gm | 40 | | | | |
| | | | | | | | | Rhizobium | 200 gm | 40 | | | | |
| | | | | | | | | Pulse Magic | 2 Kg | 550 | | | | |
| | | | | | | | | | **Total** | **1130** | | 28250 | | |
| | | | | | | | | Paraquat (For 3 demos) | 1 ltr | 1000 | | 3000 | | |
| | | | | | | | | | | | | **31250** | | |
| | | Bengalgram | • Low yield in existing local varieties<br>• Incidence of pod borer<br>• Incidence of wilt and rust | Demonstration of ICM practices in JAKI-9218 variety of Bengalgram crop | JAKI-9218 | - | UAS, Dharwad | Seeds (JAKI-9218) | 20 Kg | 1800 | 25 | **68850** | • Plant height (cm)<br>• No. of pods per plant<br>• Yield (q/ha)<br>• Incidence of wilt (%) | SMS (Agronomy) & SMS (Ag. Extn.) |
| | | | | | | | | Trichoderma | 200 gm | 44 | | | | |
| | | | | | | | | Rhizobium | 200 gm | 40 | | | | |
| | | | | | | | | PSB | 200 gm | 40 | | | | |
| | | | | | | | | Chickpea magic | 2 Kg | 550 | | | | |
| | | | | | | | | Pheromone traps | 4 No. | 280 | | | | |
| | | | | | | | | | **Total** | **2754** | | | | |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bengal gram | • Low productivity due to moisture stress | Tractor operated compartmental bund former | - | - | UAS, Raichur | Tractor operated compartmental bund former | 1 hours | 800 | 10 | **8000** | • Yield (Qtls)<br>• Soil moisture content (%) | SMS (Ag. Engg.) & SMS (Ag. Extn.) |
| | | | | | | | | | Total | 800 | | | | |
| | | Bengal gram | • High labour and time consumption in hand nipping method | Solar nipping machine | - | - | UAS, Raichur | Solar nipping machine | 3 units | **3500** | 10 | **10500** | • Yield (Qtls)<br>• No. of pods per plant<br>• Number of branches | SMS (Ag. Engg.) & SMS (Ag. Extn.) |
| 6.5 | Commercial crops | | | | | | | | | | | | | |
| 6.6 | Horticultural crops | Onion | Low income due to cultivation of local varieties Double red & Bellary red | Demonstration of ICM in Red onion variety Bheema Super | Bhima Super | - | ICAR-DOGR, Pune | Bhima Super seeds | 1 Kg | 2400 | 25 | 73350 | • Yield (Qtls)and income (Rs./ha)<br>• Pest (Nos.) and disease incidence (%)<br>• Bulb weight (gms)<br>• Labour requirement (Nos.) | SMS (Horticulture), SMS (Ag.Engg.), SMS (Soil Science) & SMS (Ag. Extn.) |
| | | | | | | | | Gypsum | 66 Kg | 330 | | | | |
| | | | | | | | | Vegetable Special | 1 Kg | 200 | | | | |
| | | | | | | | | **TOTAL** | | **3030** | | | | |
| | | | | | | | | Onion Detopper | 3 Nos | 2500 | | 7500 | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | **Total** | | **80750** | | |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Red Chilli | • Non-availability of quality and pure seeds of Byadagi Dabbi<br>• High incidence of sucking pests leading to murda complex disease & anthracnose disease<br>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality<br>• Improper post-harvest management | ICM in Byadgi Chilli | Byadgi Dabbi | - | IIHR, Bengaluru and UAS, Dharwad | Pure seeds of Byadgi Chilli | 1 Kg | 2500 | 14 | **51240** | • Yield (Qtl/ha)<br>• Disease index (%)<br>• Pest incidence | SMS (Horticulture), SMS (Home Science) & SMS (Ag. Extn.) |
| | | | | | | | | Yellow / Blue sticky traps | 16 | 960 | | | | |
| | | | | | | | | Arka Vegetable Special | 1 Kg | 200 | | | | |
| | | | | | | | | Go Krupa Amrutam (Mother culture) | 2 ltr | - | | | | |
| | | | | | | | | | **Total** | **3660** | | | | |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Horticultural crops | Vegetable Crop Cafeteria | Low productivity and income due to non-availability of improved vegetable varieties | Introduction of new varieties in vegetable crops of ICAR-IIHR, Bengaluru | Ridgegourd- Arka Prasan<br><br>Dolichos Bean – Arka Amogh<br><br>Spinach –Arka Anupama<br><br>Radish – Arka Nishant | - | IIHR, Bengaluru | Seeds of Ridgegourd | 400 gm | 1100 | 10 | **45500** | • Yield (Qtl/ha)<br>• Income (Rs./ha) | SMS (Horticulture) & SMS (Ag. Extn.) |
| | | | | | | | | Dolichos Bean | 4 Kg | 1500 | | | | |
| | | | | | | | | Spinach | 2.5 Kg | 950 | | | | |
| | | | | | | | | Radish | 1 Kg | 800 | | | | |
| | | | | | | | | Vegetable Special | 1 Kg | 200 | | | | |
| | | | | | | | | **TOTAL** | | **4550** | | | | |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ashwagandha | • Non profitability in existing cropping pattern due to vagaries of Monsoon and lack of crop diversification in field crops resulting in income insecurity to the farmers<br>• Lack of knowledge on alternate cropping system and crop diversification to sustain vagaries of Monsoon | FLD on introduction of Ashwagandha crop | Poshita | - | CSIR-CIMAP, Lucknow, UP | Seeds | 4 Kg | 1200 | 10 | **12000** | •Yield (Qtl/ha) and economics<br>•Root length & diameter<br>•Fresh and dry Root weight (gms) | SMS (Horticulture) & SMS (Ag. Extn.) |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ajwain | • Non profitability in existing cropping pattern due to vagaries of Monsoon and lack of crop diversification in field crops resulting in income insecurity to the farmers<br>• Lack of knowledge on alternate cropping system and crop diversification to sustain vagaries of Monsoon. | FLD on introduction of Ajwain crop | Ajmer Ajwain-1 | - | ICAR-NRC on seeds spices, Ajmer, Rajasthan | Seeds | 2 Kg | 600 | 5 | **3000** | •Days taken for 50% flowering<br>•Yield (Qtl/ha) | SMS (Horticulture) & SMS (Ag. Extn.) |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.7 | Livestock | Milch Cattle | Low productivity of milk due to imbalanced feed and fodder and increased inter-calving period | Production of green fodder & feeding to animals to enhance milk yield | Super Napier, Multicut Jowar-VH-988, Guinea grass, Rhodes grass, Signal grass: Lucerne, Stylosanthes Hamata 555 & Stylo Scabra seeds, Subabul K8/B-42 & Sesbania grandiflora & Fodder oats | | ICAR-IGFRI, RRS, Dharwad & UAS, Dharwad | **FORAGE CROPS** | | | 10 | **51040** | • Milk yield/Cow / lactation | Prog. Asst. (Animal Science) & SMS (Ag. Extn.) |
| | | | | | | | | Super Napier | 400 Nos. | 816 | | | | |
| | | | | | | | | Multicut – COFS-31 | 1.6 Kg | 1536 | | | | |
| | | | | | | | | Grazing guinea grass slips | 300 Nos. | 360 | | | | |
| | | | | | | | | Rhodes grass slips | 550 Nos. | 660 | | | | |
| | | | | | | | | Signal grass slips | 250 Nos. | 300 | | | | |
| | | | | | | | | Fodder Oats | 8.0 Kg | 916 | | | | |
| | | | | | | | | **LEGUME FODDER CROPS** | | | | | | |
| | | | | | | | | Lucerne seeds | 200 gm | 192 | | | | |
| | | | | | | | | Stylosanthes heamata 555 | 150 gm | 72 | | | | |
| | | | | | | | | Stylo Scabra seeds | 150 gm | 72 | | | | |
| | | | | | | | | Cow pea | 0.5 Kg | 72 | | | | |
| | | | | | | | | Subabul – K8/B-42 | 100 gm | 48 | | | | |
| | | | | | | | | Susbenia grandiflora | 100 gm | 60 | | | | |
| | | | | | | | | **Total** | | **5104** | | | | |
| 6.8 | Fisheries | | | | | | | | | | | | | |

| Sl. No. | Category | Crop/ enterprise | Prioritized problem | Technology to be demonstrated | Name of variety | Name of hybrid | Source of technology | Name of critical input | Qty per demo | Cost per demo (Rs.) | No. of demos | Total cost for the demo (Rs.) | Parameters to be studied | Team members |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.9 | Others | Solar drier | Unhygienic way of drying of Red chillies | Drying of Red chillies in solar drier and sunlight | - | - | Rudra Solar Energy, Ahmedabad, Gujarat | Solar drier (40 Kg capacity) | | Existing solar drier will be utilised | 3 | **7400** | • Drying time (Hours)<br>• Quality parameters<br>• Aflatoxin content<br>• Moisture content<br>• Whitening of chillies (%) | SMS (Home Science) & SMS (Ag. Extn.) |
| | | | | | | | | Analysis of Aflatoxin, moisture content | | 6200 | | | | |
| | | | | | | | | Miscellaneous expenditure | - | 1200 | | | | |
| | | Grain storage | • Incidence of stored grain pest | Demonstration of Super grain bags | - | - | PCI Ltd, Bengaluru | Super grain bags | 1 No. (50 Kg capacity) | 150 | 40 | **6000** | • Percentage of stored grain pest<br>• Shelf life | SMSs (Home Science) & SMS (Ag. Extn.) |
| | | | | | | | | | | **Total of FLDs** | **312** | **455258** | | |

## 7. Training for farmers/ farm women during 2022-23

| Sl.No. | Thematic area and the crop/ enterprise | Crop / Enterprise | Related field intervention (OFT/FLD) | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| 7.1 | Crop production | Natural Farming | Others | Natural Farming: A sustainable farming system under dryland condition | 6 | 150 | SMS (Agronomy) SMS (Soil science) SMS (Horticulture) |
| | | Greengram | FLD and Others | ICM practices in Greengram | 2 | 50 | SMS (Agronomy) |
| | | Blackgram | OFT and Others | ICM practices in Blackgram | 2 | 40 | SMS (Agronomy) |
| | | Groundnut | OFT, FLD and Others | ICM practices in Groundnut | 2 | 50 | SMS (Agronomy) SMS (Soil Science) |
| | | Maize | Others | ICM practices in Maize | 2 | 50 | SMS (Agronomy) SMS (Soil Science) |
| | | Cotton | Others | ICM practices in Cotton | 2 | 40 | SMS (Agronomy) |
| | | Bengalgram | OFT, FLD and Others | ICM practices in Bengalgram | 2 | 50 | SMS (Agronomy) |
| | | Safflower | OFT, FLD and Others | ICM practices in Safflower | 2 | 40 | SMS (Agronomy) SMS (Soil Science) |
| | | Wheat | Others | ICM practices in Wheat | 2 | 40 | SMS (Agronomy) SMS (Soil Science) |
| | | Rabi Sorghum | FLD and Others | ICM practices in Rabi Sorghum | 2 | 50 | SMS (Agronomy) |
| | | All crops | Others | Reclamation of problematic soil | 1 | 20 | SMS (Soil science) |
| | | Rain water harvesting | Others | Rain water harvesting | 3 | 60 | SMS (Soil science) |
| 7.2 | Horticulture production | Red Onion | OFT, FLD & Others | ICM in Red Onion crop | 3 | 60 | SMSs (Horticulture)& Soil Science) |
| | | Chilli | Others | ICM in Chilli crop | 2 | 40 | SMSs (Horticulture& Soil Science) |

| Sl.No. | Thematic area and the crop/ enterprise | Crop / Enterprise | Related field intervention (OFT/FLD) | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| | | Vegetable crops | FLD | ICM in vegetable crops | 4 | 80 | SMS (Horticulture) |
| | | Dryland horticulture | Others | Promotion of dryland horticulture | 2 | 40 | SMS (Horticulture) |
| | | Onion | Others | Usage of pre and post emergent herbicides to reduce the cost of cultivation | 1 | 20 | SMSs (Horticulture & Agronomy) |
| 7.3 | Livestock production | Animal nutrition in Dairy animals | FLD | • Promotion of fodder production technologies for getting higher milk productivity in dairy animals<br>• Silage preparation and its importance | 2 | 40 | Programme Assistant (Animal Husbandry) |
| | | Poultry birds | Others | • Scientific management of poultry birds | 1 | 20 | Programme Assistant (Animal Husbandry) |
| 7.4 | Home Science | Nutrition | FLD | Importance of protective foods and Nutrition Garden | 4 | 80 | SMS (Home Science) |
| | | Drudgery | FLD | Drudgery reducing equipments | 4 | 80 | SMS (Home Science) |
| 7.5 | Production of inputs at site | Organic input production & Organic farming | Others | Training on organic inputs production and usage in various crops | 2 | 40 | SMS (Soil Science) |
| 7.6 | Soil health and fertility | Soil health & fertility | Others | Soil fertility management in dryland / Irrigated areas | 4 | 80 | SMSs (Soil Science & Agronomy) |
| 7.7 | PHT and value addition | Value addition | FLD | Training on ICM in millet crops and importance of millets in diet and its value addition | 5 | 100 | SMSs (Home Science & Agronomy) |

| Sl.No. | Thematic area and the crop/ enterprise | Crop / Enterprise | Related field intervention (OFT/FLD) | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| | | | FLD | PHT in Chilli | 2 | 40 | SMS (Home Science) |
| | | | FLD | Value added products, packing, marketing and licensing of Chilli products | 1 | 10 | SMS (Home Science) |
| | | | Others | Training on Bakaahu products | 1 | 25 | SMS (Home Science) |
| 7.9 | Capacity building/ group dynamics | Multiple Income Generating Activities | Others | Empowerment of women SHGs through multiple IGAs | 3 | 60 | SMS (Home Science) |
| | | Capacity building | Others | Capacity building training & strengthening of SHGs | 3 | 60 | SMS (Home Science) |
| | | Farmers' Interest Group | Others | Formation of FIG and Farmers Producer Organization | 4 | 100 | SMS (Ag. Extension) |
| | | Farmers' Producer Organisation | Others | Business plan development for FPOs | 2 | 40 | SMS (Ag. Extension) |
| | | Integrated Farming System | Others | Integrated Farming System for FPO members | 2 | 40 | SMS (Ag. Extension) |
| 7.10 | Farm mechanization | Chickpea | OFT | Adoption of conservation agriculture practices in Maize-Chickpea cropping system | 2 | 50 | SMS (Ag. Engg.)& SMS (Agronomy) |
| | | Groundnut | FLD | Use of Groundnut digger cum elevator | 2 | 35 | SMS (Ag. Engg.)& SMS (Ag. Extn.) |
| | | Bt. Cotton | OFT | Mechanized spraying in Bt. Cotton | 2 | 75 | SMS (Ag. Engg.) |
| | | Onion | FLD | Line sowing of onions to facilitate mechanized interculture operations | 2 | 40 | SMS (Ag. Engg.)& SMS (Horticulture) |

| Sl.No. | Thematic area and the crop/ enterprise | Crop / Enterprise | Related field intervention (OFT/FLD) | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| 7.11 | Fisheries production technologies | Fisheries | Others | Fish farming | 1 | 10 | Programme Assistant (Animal Husbandry) & Officer of Fisheries Department |
| 7.12 | Mushroom production | Mushroom | Others | Mushroom cultivation | 1 | 10 | SMS (Home Science) |
| 7.13 | Agro forestry | Forestry crops | Others | Promotion of agro forestry for income security in dry land | 2 | 20 | SMS (Soil Science) |
| 7.14 | Bee keeping | | Others | Bee keeping in Onion seed production plots | 1 | 5 | SMS (Horticulture) & Progressive farmers |
| 7.15 | Sericulture | Sericulture | Others | Quality production of Cocoons | 1 | 10 | SMS (Ag. Extension) & Dept of Sericulture officers |
| 7.16 | Others, pl. specify | Artificial recharging of groundwater through borewell | Others | Technology on recharging of ground water through borewell | 3 | 60 | SMSs (Soil Science & Agronomy) |
| | | All field crops | Others | Usage of Organic Manure & Green Manure crops to enhance moisture holding capacity | 2 | 40 | SMSs (Soil Science & Agronomy) |
| | | | | **Total** | **99** | **2050** | |

## 8. Training for rural youth during 2022-23

| Sl. No. | Thematic area and the crop/ enterprise | Crop / Enterprise | Related field intervention (EDP/Skill development etc) | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| 8.1 | Crop production | Integrated Farming Systems | Skill Development | Integrated Farming Systems: Holistic approach for sustained yields and viable economy | 1 | 20 | SMS (Agronomy) SMS(Soil science) SMS (Horticulture) |
| | | Organic farming | Skill Development | Production of Organic inputs for ecological health and benefits | 1 | 20 | SMS (Agronomy) SMS(Soil science) SMS (Horticulture) |
| 8.2 | Horticulture production | Dryland Horticulture | Skill Development | Dryland Horticulture | 1 | 20 | SMS (Horticulture) |
| | | Coconut | Skill Development | Use of Coconut tree climber for drudgery reduction | 1 | 10 | SMS (Ag. Engg.) SMS (Horticulture) |
| 8.3 | Livestock production | Dairy enterprise | Skill Development | Skill upgradation training on dairy management practices | 4 | 100 | Programme Assistant (Animal Husbandry) |
| | | Poultry | Skill Development | Scientific management of poultry birds | 1 | 25 | Programme Assistant (Animal Husbandry) |
| | | Sheep & Goat | Skill Development | Feed and endo-ecto parasite management in sheep and goat | 2 | 40 | Programme Assistant (Animal Husbandry) |
| 8.4 | Home Science | Health and Nutrition | FLD | Health, nutrition and importance of Nutrition Garden | 4 | 100 | SMS (Home Science) |
| 8.5 | Plant protection | Bt. Cotton | Skill Development | Different types of traps for management of pests in Bt.Cotton | 1 | 25 | SMS (Agronomy) |
| 8.6 | Production of inputs at site | Jeevamruta production | Skill Development | Jeevamruta preparation & usage | 1 | 20 | SMS (Soil Science) |
| 8.7 | Soil health and fertility | Soil health and fertility | Skill Development | Soil health enhancement in dryland area through Organic input production | 1 | 25 | SMS (Soil Science) |

| Sl. No. | Thematic area and the crop/ enterprise | Crop / Enterprise | Related field intervention (EDP/Skill development etc) | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| 8.8 | PHT and value addition | Chilli | FLD | Processing and value addition in Chilli | 1 | 20 | SMS (Home Science) |
| | | Millets | Others | Millet value addition | 1 | 20 | SMS (Home Science) |
| 8.9 | Capacity building/ group dynamics | All crops | Others | Entrepreneurship development in crops and enterprise | 1 | 20 | SMS (Ag. Extension) |
| 8.10 | Farm mechanization | All field crops | Skill development | Operation and maintenance of modern agricultural machinery | 1 | 15 | SMS (Ag. Engg.) |
| 8.11 | Fisheries production technologies | Fisheries | Skill Development | Fish Farming | 1 | 10 | Programme Assistant (Animal Husbandry) & Officer of Fisheries Department |
| 8.12 | Mushroom production | Mushroom | Skill Development | Mushroom production | 1 | 10 | SMS (Home Science) |
| 8.13 | Agro forestry | Forestry crops | Others | Promotion of agro forestry for income security in dry land | 1 | 30 | SMS (Soil Science) |
| 8.14 | Bee keeping | Bee keeping | Skill Development | Bee keeping in orchards | 1 | 10 | SMS (Horticulture) & Horticulture Department Officers |
| 8.15 | Sericulture | Sericulture | Skill Development | Production technology of mulberry crop | 1 | 10 | SMS (Horticulture) & Sericulture Department Officers |
| 8.16 | Others, pl. specify | | | | | | |
| | | | **Total** | | **27** | **550** | |

## 9. Training for extension personnel during 2022-23

| Sl.No. | Thematic area and the crop/ enterprise | Training title | No. of courses | Expected No. of participants | Names of the team members involved |
|---|---|---|---|---|---|
| 9.1 | Crop production | ICM practices in different crops and cropping systems | 1 | 25 | SMS (Agronomy)<br>SMS (Soil Science) |
| 9.2 | Home Science | | | | |
| | Deficiency diseases | Iron rich foods to overcome iron deficiency diseases | 4 | 150 | SMS (Home Science) |
| | Nutrition | Nutrition Garden – It's importance and layout | | | |
| 9.3 | Capacity building and group dynamics | Formation and functioning of Farmers' Producer Organisation | 1 | 25 | SMS (Ag. Extension) |
| | | Design, layout and conducting front line demonstrations for ATMA staff | 1 | 10 | SMS (Ag. Extension) |
| 9.4 | Horticulture | Advances in horticulture crops | 1 | 10 | SMS (Horticulture)<br>SMS (Ag. Extension) |
| 9.5 | Livestock production and management | Nutrition and disease management | 1 | 30 | Programme Assistant (Animal Husbandry) |
| 9.6 | Plant protection | IPM technologies for different crops | 1 | 25 | SMS (Agronomy) |
| 9.7 | Farm mechanization | Mechanization for sustainable agriculture production | 1 | 10 | SMS (Ag. Engg.) |
| 9.8 | PHT and value addition | Value addition in agriculture and horticulture crops | 1 | 20 | SMS (Home Science) |
| 9.9 | Production of inputs at site | Organic input preparation | 1 | 20 | SMS (Soil Science) |
| 9.10 | Sericulture | - | - | - | - |
| 9.11 | Fisheries | | | | |
| 9.12 | Other, pl. specify | | | | |
| | Soil fertility | Importance of soil testing and soil fertility management | 1 | 25 | SMS (Agronomy)<br>SMS (Soil Science) |
| | Natural farming | Crop production technologies in different crops under natural farming | 1 | 25 | SMS (Agronomy)<br>SMS (Soil Science) |
| | | **Total** | **15** | **375** | |

## 10. Vocational trainings during 2022-23

| Sl. No. | Thematic area and the crop/ enterprise | Training title | No. of programmes | Duration (days) | Expected No. of participants | Sponsoring agency, if any | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| 10.1 | Crop production | Integrated farming system models for different agro-climatic condition | 1 | 3 | 25 | KSDA | SMS (Agronomy) |
| 10.2 | Home Science | Food processing | 1 | 3 | 20 | RSETI | SMS (Home Science) |
| 10.3 | Capacity building and group Dynamics | | | | | | |
| 10.4 | Horticulture | Nursery management | 1 | 3 | 15 | - | SMS (Horticulture) |
| 10.5 | Livestock production and management | Scientific management of dairy animals | 2 | 10 | 60 | RSETI, ASF, ZP etc | Programme Assistant (Animal Husbandry) |
| | | Scientific management of sheep and goat | 2 | 3 | 50 | AH & VS Dept., ASF, ZP etc | Programme Assistant (Animal Husbandry) |
| | | Scientific management of poultry birds | 1 | 3 | 30 | AH & VS Dept., ASF, ZP etc | Programme Assistant (Animal Husbandry) |
| 10.6 | Plant protection | Pest and disease management in field crops | 1 | 3 | 25 | KSDA | SMS (Agronomy) |
| 10.7 | Farm mechanization | Renewable energy based gadgets | 1 | 3 | 30 | - | SMS (Ag. Engg.) |
| 10.8 | PHT and value addition | Value addition in Agriculture and Horticulture crops | 1 | 3 | 20 | ATMA | SMS (Home Science) |
| 10.9 | Production of inputs at site | | | | | | |
| 10.10 | Sericulture | | | | | | |
| 10.11 | Fisheries | | | | | | |
| 10.12 | Other, pl. specify | | | | | | |
| | | **Total** | **11** | | **275** | | |

## 11. Sponsored trainings during 2022-23

| Sl.No. | Thematic area and the crop/ enterprise | Training title | No. of programmes | Duration (days) | Expected number of participants | Sponsoring agency | Names of the team members involved |
|---|---|---|---|---|---|---|---|
| 11.1 | Crop production | Production technology for Kharif and Rabi crops | 2 | 2 | 50 | KSDA | SMS (Agronomy & Soil Science) |
| 11.2 | Home Science | | | | | | |
| 11.3 | Capacity building and group Dynamics | | | | | | |
| 11.4 | Horticulture | | | | | | |
| 11.5 | Livestock production and management | | | | | | |
| 11.6 | Plant protection | | | | | | |
| 11.7 | Farm mechanization | Mechanization in field crops | 1 | 1 | 30 | KSDA | SMS (Ag. Engg.& Agronomy) |
| 11.8 | PHT and value addition | | | | | | |
| 11.9 | Production of inputs at site | | | | | | |
| 11.10 | Sericulture | | | | | | |
| 11.11 | Fisheries | | | | | | |
| 11.12 | Others, pl. specify | | | | | | |
| | | **Total** | **3** | | **80** | | |

## 12. Extension activities during 2022-23

| Sl. No. | Extension activity | No. of activities | Targeted number of participants | Names of the team members involved |
|---|---|---|---|---|
| 12.1 | Advisory services | 1500 | 1500 | All staff |
| 12.2 | Diagnostic visits | 20 | 50 | SMSs (Agronomy & Horticulture) |
| 12.3 | Field days | 12 | 1000 | All staff |
| 12.4 | Group discussions | 10 | 150 | All staff |
| 12.5 | Kisan gosthies | 2 | 200 | All staff |
| 12.6 | Film shows | 10 | 410 | All staff |
| 12.7 | Self -Help Groups (SHGs) meetings | 10 | 200 | SMS (Home Science) |

| Sl. No. | Extension activity | No. of activities | Targeted number of participants | Names of the team members involved |
|---|---|---|---|---|
| 12.8 | Kisan Melas | 1 | 400 | SMS (Ag. Extension) |
| 12.9 | Exhibitions | 3 | 12000 | All staff |
| 12.10 | Scientists' visit to farmers' fields | 200 | 900 | All staff |
| 12.11 | Plant/soil health/animal health camps | 5 | 450 | All staff |
| 12.12 | Farm science club meetings (FIG/FPO) | 5 | 150 | SMS (Ag. Extension) |
| 12.13 | Ex-trainees sammelanas (Meetings) | 2 | 100 | SMS (Ag. Extension) |
| 12.14 | Farmers' seminars/workshops | 2 | 250 | SMS (Ag. Extension) |
| 12.15 | Method demonstrations | 30 | 950 | All staff |
| 12.16 | Celebration of important days | 10 | 1000 | All staff |
| 12.17 | Special day celebrations | 1 | 100 | All staff |
| 12.18 | Exposure visits | 10 | 300 | All staff |
| 12.19 | Technology week celebration | 1 | 2500 | All staff |
| 12.20 | Farm innovators' meet | 1 | 20 | SMS (Ag. Extension) |
| 12.21 | Awareness programmes | 30 | 1500 | SMS (Ag. Extension) |
| 12.22 | Pre-kharif campaign | 10 | 300 | SMS (Agronomy) |
| 12.23 | Pre-rabi/summer campaign | 10 | 355 | SMS (Agronomy) |
| 12.24 | Others, pl. specify | | | |
| 12.25 | Lectures delivered as resource persons | 15 | 2500 | All staff |
| | News paper coverage | 35 | - | All staff |
| | Radio talks | 40 | - | All staff |
| | TV Talks | 3 | - | All staff |
| | Popular articles | 5 | - | All staff |
| | Bi-monthly meeting | 5 | 50 | All staff |
| | Animal health camp | 2 | 100 | Programme Assistant (Animal Husbandry) |
| | **Total** | **1990** | **27435** | |

## 13. Activities proposed as knowledge and resource centre during 2022-23

### 13.1 Technological knowledge

| Sl. No. | Category | Details of technologies | Area (ha) | Number | Names of the team members involved |
|---|---|---|---|---|---|
| 13.1.1 | Technology park/ crop cafeteria | • Agri-Horti system | 1 | - | SMS (Agronomy and Horticulture) & Farm Manger |
| | | • Nutri-cereals cafeteria (Foxtail millet, Little millet, Browntop millet and Pearl millet) | 0.4 | - | SMS (Agronomy) & Farm Manger |
| | | • Natural farming | 0.4 | - | SMS (Agronomy, Horticulture and Soil Science) & Farm Manger |
| 13.1.2 | Demonstration units | • Value addition in Amla, Mango, Tamarind etc. | - | 500 farmers/ farm women visit to the units | SMS (Home Science) |
| | | • Mixed orchard of fruit crops – Mango & Cashew | 8 ha. | 1000 farmers/farm women visit to orchards | SMS (Horticulture) |
| 13.1.3 | Lab analytical services | • Soil, water & plant testing | - | 1000 samples | SMS (Soil Science) |
| | | • Identification of pest and disease | - | 100 samples | SMS (Agronomy & Horticulture) |
| 13.1.4 | Technology week | Technologies relevant to Gadag district | - | 8000-10000 farmers/farm women | All staff |
| 13.1.5 | Others, Pl. specify | | | | |

**13.2 Technological products**

| Sl. No. | Category | Name of the production partner agency, if any | Name of the product | Quantity planned to be produced during 2022-23 (q) | Number planned to be produced during 2022-23 | Names of the team members involved |
|---|---|---|---|---|---|---|
| 13.2.1 | Seeds | Farmers' FPOs | Onion | 5 | - | SMS(Horticulture) & Farm Manager |
| | | Farmers' FPOs | Greengram | 15 | - | SMS(Agronomy) & Farm Manager |
| | | Farmers' FPOs | Redgram | 5 | | |
| | | Farmers' FPOs | Bengalgram | 30 | | |
| | | Farmers' FPOs | Safflower | 20 | | |
| | | Farmers' FPOs | Rabi Sorghum | 10 | | |
| 13.2.2 | Planting material | | Mango | - | 500 | SMS(Horticulture) & Farm Manager |
| | | | Tamarind | - | 500 | |
| | | | Cashewnut | - | 1000 | |
| | | | | | | |
| | | | Fodder crops / fodder slips | - | 50000 | Programme Assistant, (Animal Science) & Farm Manager |
| 13.2.3 | Bio-products | | Vermicompost | 200 | - | SMS(Soil Science) & Farm Manager |
| | | | Vermiwash | 500 lit | - | |
| | | | Earthworms | 2.5 | - | |
| | | | Azolla | 1.0 | - | |
| 13.2.4 | Livestock strains | | Calves | - | 2 | Programme Assistant, (Animal Science) & Farm Manager |
| | | | Lambs | - | 4 | |
| | | | Kids | - | 8 | |
| 13.2.5 | Fish fingerlings | | | | | |
| | | | | | | |
| | | | | | | |
| 13.2.6 | Any other, pl specify | | Pickles | 4 | - | SMS (Home Science) & Farm Manager |
| | | | Amla products | 1 | - | |
| | | | | | | |

**13.3 Technological information**

| | Category | Technological capsules / Number | Names of the team members involved |
|---|---|---|---|
| 13.3.1 | Technology backstopping to line departments | | |
| | Agriculture | • Role of macro & micro nutrients in crop production<br>• In-situ soil & water conservation practices | SMS (Soil Science) |
| | | • Pod borer identification and management in Greengram<br>• Powdery mildew identification and management in Greengram<br>• Identification and management of different sucking pests in Cottton<br>• Identification and management of different boll worms in Cottton<br>• Black arm and Alternaria leaf spot management in Cotton<br>• Nutrient management in Maize<br>• Chemical weed management in Maize<br>• Identification and management of Armyworm in Maize<br>• Turcicum leaf blight management in Maize<br>• Identification and management of leaf minor and leaf spot in Groundnut<br>• Management of Root grub in Groundnut<br>• Management of Tikka disease in Groundnut<br>• Podborer and wilt management in Bengalgram<br>• Low cost technologies to increase productivity in Bengalgram<br>• Management of Capsule borer and Leaf spot in Safflower<br>• Management of Necrosis and RHHC in Sunflower<br>• Management of Powdery mildew and pod borer in Blackgram<br>• Stem borer, termites, rust and leafspot management in Wheat<br>• Seed priming with CalCl2 for Rabi Sorghum<br>• Shoot fly, stem borer and army worm management in Rabi Sorghum<br>• Organic input production technologies<br>• Contingent crop planning<br>• Natural Farming<br>• Foliar spray of KNO3 for drought tolerance<br>• Use of nano-fertlizers as foliar spray in different crops | SMS (Agronomy) |

| | Category | Technological capsules / Number | Names of the team members involved |
|---|---|---|---|
| | | • Chemical weed management<br>• Seed priming with $CaCl_2$ for Rabi Sorghum<br>• Opening of conservation furrow for moisture conservation<br>• Compartment bunding for soil moisture conservation<br>• Nipping in Bengalgram & Redgram and its importance<br>• Contingent crop planning<br>• Foliar spray of $KNO_3$ for drought tolerance | SMS (Agronomy) |
| | Horticulture | • Onion thrips and purple blotch identification and management<br>• Chilli murda complex identification and management<br>• Weed management in Onion<br>• Nutrient management in fruit crops<br>• Orchard management in Cashew crop<br>• Chilli pest and disease management<br>• Mango pest and disease management<br>• Ashwagandha crop as boon for drought proofing | SMS (Horticulture) |
| | Agricultural Engineering | • Mechanization in field crops<br>• Use of suitable machineries for mechanized operations in orchard crops<br>• Farm machineries for small and marginal farmers<br>• Standard operating practices of dangerous farm machineries to avoid injuries<br>• Operation and maintenance of tractors and other agricultural machinery for enhancing useful life<br>• Management of natural resources through resource conserving machinery<br>• Renewable energy applications in agriculture<br>• Soil and water conservation practices in problematic fields | SMS (Ag. Engg.) |
| | Animal Husbandry | • Scientific Dairy Management technologies | Programme Assistant (Animal Husbandry) |
| | Fisheries | • Fish rearing in Tanks | Programme Assistant (Animal Husbandry) |
| | Others, pl. specify | • Nutrition & importance of Nutri-Garden | SMS (Home Science) |

| | Category | Technological capsules / Number | Names of the team members involved |
|---|---|---|---|
| 13.3.2 | Literature/publication | **Leaflets** | |
| | | • Scientific Dairy Management | Programme Assistant (Animal Husbandry) |
| | | • Soil & water conservation measures for dry land agriculture | SMS (Soil Science) & SMS (Agronomy) |
| | | • Suitable Cooking oil for household consumption<br>• Safflower oil importance and benefits of its uses | SMS (Home Science) |
| | | **Leaflets**<br>• Dryland agriculture practices for higher productivity<br>• Production technologies in different crops<br>✓Maize<br>✓Greengram<br>✓Blackgram<br>✓Cotton<br>✓Groundnut<br>✓Bengalgram<br>✓Safflower<br>✓Rabi Sorghum<br>✓Sunflower<br>✓Wheat<br>**Krishi Vigyan Patrike**<br>• Improved Crop Management practices in different crops<br>✓Maize<br>✓Greengram<br>✓Blackgram<br>✓Cotton<br>✓Groundnut<br>✓Bengalgram<br>✓Safflower<br>✓Rabi Sorghum<br>✓Sunflower<br>✓Wheat | SMS (Agronomy) |

| | Category | Technological capsules / Number | Names of the team members involved |
|---|---|---|---|
| | | **Leaflets**<br>• Modern farm equipment for higher productivity<br>• Energy efficient farm machineries for efficient field operations<br>• Drudgery reducing small farm equipment for farm women<br>• Resource conserving technologies for enhanced profitability<br>• Use of renewable energy sources in agricultural operations<br>• Importance of micro irrigation systems in varied cropping systems<br>• Technologies for *in-situ* conservation of rain water | SMS (Ag. Engg.) |
| | | **Krishi Vigyan Patrike**<br>• Importance & methods of soil and water testing<br>• Soil & water conservation measures<br>• Alternate land use systems<br>• Role of nutrients for higher production | SMS (Soil Science) |
| | | • Production technologies in Onion<br>• Tips on cultivation of onion & chilli<br>• Weed management in onion<br>• Onion seed production technology<br>• Mango orchard management<br>• Nutrient management in Mango<br>• Post harvest management in Mango | SMS (Horticulture) |
| | | • Spiral separator<br>• Importance of value addition in millets<br>• Bio-fortified crops | SMS (Home Science) |
| | | • Compartment bunding for moisture conservation<br>• Production technology of Maize<br>• Paired row method of sowing in Groundnut<br>• Integrated nutrient management in Groundnut<br>• Wider row method of sowing in Sunflower<br>• Foliar spray of boron for seed setting in Sunflower<br>• Detopping and its importance in Bengalgram<br>• Paired row method of sowing in Rabi Sorghum<br>• $CaCl_2$ seed priming & its importance in Rabi Sorghum | SMS (Agronomy) |

| | Category | Technological capsules / Number | Names of the team members involved |
|---|---|---|---|
| 13.3.3 | Electronic Media | • Demonstration on enrichment of dry fodder and azolla cultivation | Programme Assistant (Animal Husbandry) |
| | | • Dryland agronomic practices for *in-situ* moisture conservation | SMS (Agronomy) |
| | | • Sorghum and its value addition | SMS (Home Science) |
| 13.3.4 | Kisan Mobile Advisory Services | Soil Science aspects – 6 Nos. | SMS (Soil Science) |
| | | Home Science aspects – 10 Nos. | SMS (Home Science) |
| | | Horticulture crop – 10 Nos. | SMS (Horticulture) |
| | | Field crops – 20 Nos. | SMS (Agronomy) |
| | | Animal Science aspects – 15 Nos. | Programme Assistant (Animal Husbandry) |
| | | Market information, Input availability & other messages – 20 Nos. | Programme Assistant (Computers) |
| 13.3.5 | Information on centre/state sector schemes and service providers in the district (Data may be collected from different agencies). | One booklet on both Centre and State Sector Schemes and Service Providers | SMS (Ag.Extension) |

## 14. Additional activities planned during 2022-23

| Sl. No. | Name of the agency / scheme | Name of activity | Technical programme with quantification | Financial outlay (Rs. in lakh.) | Names of the team members involved |
|---|---|---|---|---|---|
| 1 | Nutri Garden | Nutritional security through Nutri garden | 25 | 0.25 | SMS (Home Science) |
| 2 | CFLDs on Pulses and Oilseeds | CFLDs in Greengram | 50 Ha | 4.50 | SMS (Agronomy) |
| | | CFLDs in Bengalgram | 50 Ha | 4.50 | SMS (Agronomy) |
| | | CLFDs in Summer Groundnut | 20 Ha | 2.40 | SMS (Agronomy) |

## Details of Nutri Garden

Nutri Garden for year round nutritional security among farm families

Village : Halligudi (Mundaragi), Asundi (Gadag), Akkigund (Laxmeshwar) & Muganur (Naragund)

| Problems | Technology to be demonstrated |
|---|---|
| • Lack of awareness about nutrition & nutri garden<br>• Less consumption of vegetables due to high price of vegetables and fruits<br>• Lack of awareness on super foods | • Production of vegetables<br>• Planting of perennial nutritious plants<br>• Introduction of super foods like Chia and grain amaranth |

| Critical inputs | Qty / Demo | Cost / Demo | No. of Demo | Total cost (Rs.) | Parameters |
|---|---|---|---|---|---|
| Seeds & seedlings (Lime-Kagzi, Drumstick-Bhagya, Papaya-Solo, curry leaf-Suhasini, Guava-Lucknow 14 & Apple Ber) | 02 unit | 400 | 25 | 25000 | • Quantity of vegetables produced (Kg)<br>• Economics<br>• Percent adequacy of vegetables |
| Vegetable seeds (Brinjal. Okra, Beans, Cucumber, Tomato, Chilli, Beetroot, Carrot etc.) | 200 gms | 250 | | | |
| Leafy vegetables (Amaranthus, Palak, Dil, Coriander, Methi, Rajagiri etc.) | 100 gms | 250 | | | |
| Bio-fertilisers | 1 Kg | 100 | | | |
| | | | | | |
| | **Total** | **1000** | | | |

## 14.C

## CFLD (CLUSTER FRONT LINE DEMONSTRATIONS)

**i) Pulses :**

| Sl. No. | Name of the crop | No. of demonstrations | Area (ha) |
|---|---|---|---|
| Kharif 2022-23 | | | |
| 1 | Greengram | 125 | 50 |
| Rabi 2022-23 | | | |
| 3 | Bengalgram | 125 | 50 |
| | **Total** | **250** | **100** |

**ii) Oilseeds :**

| Sl. No. | Name of the crop | No. of demonstrations | Area (ha) |
|---|---|---|---|
| Summer 2022-23 | | | |
| 1 | Groundnut | 50 | 20 |

**15. Plan of activities under revolving fund during 2022-23**

| Sl. No. | Proposed activities | Expected output | Anticipated income (Rs.) | Names of the team members involved |
|---|---|---|---|---|
| 1 | Production of pickles and amla products | 10 Qtls | 96000 | SMS (Home Science) & Farm Manager |
| 2 | Onion seed production | 5 Qtls | 250000 | SMS (Horticulture) & Farm Manager |
| 3 | Greengram | 10 Qtls | 60000 | SMS (Agronomy) & Farm Manager |
| 4 | Bengalgram | 20 Qtls | 110000 | SMS (Agronomy) & Farm Manager |
| 5 | Safflower | 20 Qtls | 100000 | SMS (Agronomy) & Farm Manager |
| 6 | Rabi Sorghum | 10 Qtls | 30000 | SMS (Agronomy) & Farm Manager |
| 7 | Mango grafts | 500 Nos. | 10000 | SMS (Horticulture) & Farm Manager |
| 8 | Tamarind grafts | 500 Nos. | 8000 | SMS (Horticulture) & Farm Manager |

| | | | | |
|---|---|---|---|---|
| 9 | Amla seedlings | 1000 Nos. | 20000 | SMS (Horticulture) & Farm Manager |
| 10 | Fodder crops | 30000 Nos. | 30000 | Programme Assistant (Animal Science) & Farm Manager |
| 11 | Vermicompost production | 15 ton | 30000 | SMS (Soil Science) & Farm Manager |
| 12 | Vermiwash | 250 liters | 10000 | SMS (Soil Science) & Farm Manager |
| 13 | Earthworms | 2 Qtls | 20000 | SMS (Soil Science) & Farm Manager |
| 14 | Milk production | 3600 liters | 126000 | Programme Assistant (Animal Science) & Farm Manager |
| 15 | Lambs | 4 | 6000 | Programme Assistant (Animal Science) & Farm Manager |
| 16 | Kids | 8 | 12000 | Programme Assistant (Animal Science) & Farm Manager |

## 16. Activities of soil, water and plant testing laboratory during 2022-23

| Sl. No. | Type of samples | No. of samples to be analyzed | Names of the team members involved |
|---|---|---|---|
| 16.1 | Soil test using analytical lab | 1000 | SMS (Soil Science) |
| 16.2 | Soil test using mobile analysis kit | 300 | SMS (Soil Science) |
| 16.3 | Water | 500 | SMS (Soil Science) |
| 16.4 | Plant | 0 | - |
| 16.5 | Others, pl. specify | | |

## 17. E-linkage during 2022-23

| Sl. No | Nature of activities | Likely period of completion (please set the time frame) | Remarks if any |
|---|---|---|---|
| 17.1 | Title of the technology module to be prepared | Chilli (February 2023) | |
| 17.2 | Creation and maintenance of relevant database system for KVK | Entering data every week | Already maintained |
| 17.3 | Any other (Please specify) | | |
| | KVK Knowledge network portal | Updating events every week | - |
| | | Updating MPR and AE MPR every month | |

**18. Activities planned under rainwater harvesting scheme (only to those KVKs which are already having scheme under rain water harvesting)**

| Sl. No | Activities planned | Remarks if any |
|---|---|---|
| 1 | Training to farmers and farm women on rain water harvesting<br>(4 programmes, 120 participants) | - |
| 2 | Training to extension functionaries on rain water harvesting (1 programme, 25 participants) | - |
| 3 | Facilitation for rain water harvesting through borewell and openwells for ground water recharging<br>(5 Nos.) | - |

**19. Farmers Field School (FFS) planned :**

| Thematic area | Title of the FFS | Budget proposed in Rs. |
|---|---|---|
| Fodder production technologies | Fodder cultivation | 30000 |

**-:O:-**