

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

## ACTION PLAN FOR 2023-24

### 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 Hulkoti – 582205 Dist.: Gadag, State: Karnataka Phone : (08372) 289606 E-mail : <a href="mailto:kvk.gadag@icar.gov.in">kvk.gadag@icar.gov.in</a> , <a href="mailto:kvkhulkoti@gmail.com">kvkhulkoti@gmail.com</a> Website: <a href="https://kvkgadag.icar.gov.in">https://kvkgadag.icar.gov.in</a>
1.2	Name and address of host organization	:	Agricultural Science Foundation Hulkoti – 582205 District: Gadag, State: Karnataka Phone : (08372) 289069 E-mail : <a href="mailto:hulkotiasf@gmail.com">hulkotiasf@gmail.com</a> Website: <a href="http://www.asf.ind.in">www.asf.ind.in</a>
1.3	Year of sanction	:	1985
1.4	Website address of KVK and date of last update	:	<a href="https://kvkgadag.icar.gov.in">https://kvkgadag.icar.gov.in</a> and date of last update is 18-03-2023

### 2.Details of staff as on date

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If permanent, please indicate		Date of joining	If temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Pay Level	Current Basic Pay		
2.1	Senior Scientist & Head/PC	Dr. L.G. Hiregoudar	Crop Physiology	L-14	218200	05.09.1992	P
2.2	Subject Matter Specialist	Dr. Sudha V. Mankani	Home Science	L-12	119300	26.06.1995	P
2.3	Subject Matter Specialist	Mr. N.H. Bhandi	Soil Science	L-11	96600	01.06.2005	P
2.4	Subject Matter Specialist	Mrs. Hemavati R.H.	Horticulture	L-10	61300	14.02.2020	P
2.5	Subject Matter Specialist	Dr. Vinayaka Niranjana	Agri. Engineering	L-10	57800	11.10.2021	P

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If permanent, please indicate		Date of joining	If temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Pay Level	Current Basic Pay		
2.6	Subject Matter Specialist	VACANT	Ag. Extension				
2.7	Subject Matter Specialist	VACANT	Agronomy				
2.8	Programme Assistant (Animal Science)	Dr. B.M. Murgod	Animal Husbandry	L-7	60400	25.06.2007	P
2.9	Programme Assistant (Computer Programmer)	Mrs. Lalita S.Asuti	Computers	L-7	66000	01.06.2005	P
2.10	Programme Assistant (Farm Manager)	Mr. Suresh L. Halemani	Farm management	L-7	53600	01.02.2011	P
2.11	Assistant	Mr. M.B. Jakkanagoudar	Accounts	L-7	60400	25.06.2007	P
2.12	Stenographer	Mr. T.K. Sai Swaroop Rao	-	L-4	30500	15.12.2016	P
2.13	Driver Cum Mechanic	Mr. N.L. Hadapad	-	L-4	46100	03.09.1992	P
2.14	Driver Cum Mechanic	Mr. G.D. Madivalar	-	L-4	41000	26.06.1995	P
2.15	Skilled Support Staff-1	Mrs. Savita V. Karadani	-	L-1	19700	14.02.2020	P
2.16	Skilled Support Staff -2	VACANT	-				

### 3. Details of SAC meeting conducted during 2022-23

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
22-02-2023	19	Introduce more perennial fruits and vegetables in Nutri Garden	These recommendations are included in the Action Plan of 2023-24	-
		Conduct trainings on vegetable and fruit processing.		
		Include cucumber variety released by IIHR under Vegetable Cafeteria.		
		Impart trainings on IFS in order to enable farmers to get good income and give thrust to animal components also		
		Give thrust to Intercropping and Mixed cropping during trainings.		
		Train farmers to take up seed treatment in Redgram crop to reduce incidence of wilt problem in the district		
		Pure Byadagi variety seed production in Chilli crop be encouraged among farmers so as to make pure Byadagi variety seeds available to villagers.		
		Conduct group meeting / crop seminar in Mango crop to overcome pest problem involving Subject Experts.		
		Advise farmers for going to buffaloe rearing as buffaloe milk fetches good market price and thus farmers can get good returns.		
		Advise farmers for planting fodder trees on bunds so as to feed animals, sheep and goat even during off-seasons.		
		Take up Paraquat spray for shedding of leaves in Greengram before mechanical harvesting to ease the harvesting operation and also suggested to go for eco-friendly treatment with high salt concentrate in place of chemical i.e Paraquat.		
		Take up method demonstrations of seed treatment in Greengram seeds before sowing to manage Yellow Vein Mosaic Virus.		
Promote BJV-44 variety of Rabi Sorghum through demonstrations.				

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
		Advise farmers to go for Ridges and Furrows in Chilli crop in case of excess rainfall during the season.	These recommendations are included in the Action Plan of 2023-24	-
		Advise farmers to go for wider spacing (row to row) in Bengalgram crop for good mechanical harvesting.		

Tentative date of SAC meeting proposed during 2023-24 : 30-11-2023

#### 4. Details of operational areas proposed during 2023-24

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.)*
<b>Cluster A</b> Asundi (Gadag block)	Maize	<ul style="list-style-type: none"> <li>• Imbalanced nutrition</li> <li>• Application of excess Nitrogen</li> <li>• Incidence of Army worm</li> <li>• Drudgery during threshing and winnowing of Maize</li> <li>• Incidence of Turcicum leaf blight and Bacterial stalk rot</li> <li>• High labour requirement for harvesting of maize</li> </ul>	40 ha. (40% of the irrigated area)	<ul style="list-style-type: none"> <li>• Training on INM practices in Maize</li> <li>• Trainings on use of machineries in maize cultivation</li> <li>• Supply of literature</li> </ul>
	Greengram	<ul style="list-style-type: none"> <li>• Low yield due to use of local variety</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of Powdery mildew and Pod borer</li> <li>• Seed shattering problem during harvesting in local variety China Moong</li> <li>• Moisture stress due to long dry spells in Kharif</li> </ul>	45 ha (30% of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Greengram</li> <li>• FLD on Compartmental Bund Former</li> <li>• Training on ICM in Greengram</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>

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.)*
	Bt. Cotton	<ul style="list-style-type: none"> <li>• Incidence of Pink bollworm</li> <li>• Incidence of Leaf reddening</li> <li>• Incidence of sucking pests</li> </ul>	15 ha (10% of the area)	<ul style="list-style-type: none"> <li>• Training on use of Splat pheromone technique to control pink bollworms with method demonstration</li> <li>• Training on ICM practices in cotton</li> <li>• Field day</li> </ul>
	Bengalgram	<ul style="list-style-type: none"> <li>• Low yield due to cultivation of local varieties</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of pod borer</li> <li>• Incidence of Wilt and Rust</li> </ul>	150 ha (50% of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Bengalgram</li> <li>• Training on ICM practices in Bengalgram</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
		<ul style="list-style-type: none"> <li>• Non profitability due to no nipping</li> <li>• Drudgery of Operation involved in Manual Nipping of Chickpea</li> </ul>		<ul style="list-style-type: none"> <li>• FLD on solar nipping machine</li> <li>• Trainings on use of machineries in chickpea cultivation</li> <li>• Field day</li> </ul>
	Rabi Sorghum	<ul style="list-style-type: none"> <li>• Low productivity due to use of local variety</li> <li>• Incidence of shoot fly and stem borer</li> <li>• Incidence of smut diseases</li> <li>• Problem of lodging in existing variety</li> </ul>	40 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Rabi Sorghum</li> <li>• Training on ICM practices in Rabi Sorghum</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
	Summer groundnut	<ul style="list-style-type: none"> <li>• Low yield due to use of local varieties</li> <li>• Imbalanced nutrition</li> <li>• Incidence of collar rot and root grub</li> </ul>	50 ha (50% of the irrigated area)	<ul style="list-style-type: none"> <li>• FLD on INM in Summer Groundnut</li> <li>• Training on ICM practices in summer groundnut</li> <li>• Field Day</li> <li>• Supply of literature</li> </ul>
		<ul style="list-style-type: none"> <li>• Drudgery involved in manual harvesting</li> <li>• Low income due to high labour cost</li> </ul>		<ul style="list-style-type: none"> <li>• Trainings on use of machineries in groundnut cultivation</li> </ul>

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.)*
	Safflower	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> <li>• Incidence of sucking pests</li> <li>• Incidence of Capsule borer</li> <li>• Incidence of Alternaria leaf spot</li> </ul>	100 ha (50 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in ISF-764 variety</li> <li>• Training on ICM practices in Safflower</li> <li>• Supply of literature</li> <li>• Field Day</li> </ul>
	Vegetable crops	<ul style="list-style-type: none"> <li>• Low income due to cultivation of local varieties</li> <li>• Application of imbalanced fertilizers</li> </ul>	36 ha. (60% of the irrigated area)	<ul style="list-style-type: none"> <li>• FLD on introduction of ICAR-IIHR varieties of vegetable crops ( Ridgegourd, Radish, Spinach, Dolichos Bean, Cucumber and Drumstick)</li> <li>• Assessment of high yielding okra hybrids for higher productivity</li> <li>• Trainings on ICM in vegetable crops</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
	Red Chilli	<ul style="list-style-type: none"> <li>• Non-availability of quality and pure seeds of Byadgi Dabbi</li> <li>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases</li> <li>• Improper post-harvest management (Drying &amp; storage of chilli and its powder)</li> </ul>	250 ha. (60% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on ICM in Chilli crop</li> <li>• Training on ICM</li> <li>• Supply of relevant literature</li> <li>• Farm advisory services</li> <li>• Rendering Kisan Mobile Advisory Services to farmers</li> <li>• Field day</li> <li>• Seed production</li> </ul>

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.)*
	Onion	<ul style="list-style-type: none"> <li>• Imbalanced nutrition application without soil testing</li> <li>• Low productivity in existing variety Bellary Red onion</li> <li>• Low keeping quality of bulbs in existing variety</li> <li>• High incidence of thrips &amp; purple blotch</li> <li>• High incidence of weeds</li> <li>• High labour requirement in detopping of harvested onion crop</li> </ul>	250 ha. (60% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on introduction of Bhima Super variety along with ICM practices</li> <li>• Demonstration of Battery Operated Onion Detopper</li> <li>• Trainings on ICM in onion crop</li> <li>• Seed production activities with identified seed farmers for supply of quality seeds of Bhima Super variety in village</li> <li>• Supply of relevant literature</li> <li>• Field day</li> </ul>
	Nutrition and health	<ul style="list-style-type: none"> <li>• Less consumption of fruits and vegetables</li> <li>• Lack of awareness on nutritional importance and value addition of flax seeds</li> <li>• Lack of availability of Omega-3 Fatty acids in vegetarian diet.</li> </ul>	85% families	<ul style="list-style-type: none"> <li>• FLD on Nutri Garden</li> <li>• Training on balanced diet and nutrition</li> <li>• Training on importance of millets in diet</li> <li>• Field day</li> </ul>
	Millets	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> <li>• Lack of awareness on millet nutrition and value addition</li> </ul>	90% families	<ul style="list-style-type: none"> <li>• FLD on HN-46 variety of Foxtail Millet</li> <li>• Training on preparation of millet products</li> <li>• Training</li> <li>• Supply of literature</li> </ul>
	Grain storage	<ul style="list-style-type: none"> <li>• Incidence of stored grain pest</li> </ul>	50% families	<ul style="list-style-type: none"> <li>• FLD on demonstration of Super grain bags</li> <li>• Training on management of stored grain pests</li> <li>• Home visits and interactive meetings</li> <li>• Supply of literature</li> <li>• Supply of super grain bags</li> </ul>
	Borewell	<ul style="list-style-type: none"> <li>• Decreased ground water level and less water availability for irrigation</li> </ul>	160 ha. (37%)	<ul style="list-style-type: none"> <li>• Training on recharge of ground water through borewell</li> <li>• Field visits to demonstration units of artificial recharge of ground water through borewell</li> </ul>

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.)*
				<ul style="list-style-type: none"> <li>• Supply of literature</li> </ul>
<b>Cluster B</b> Halligudi (Mundaragi block)	Greengram	<ul style="list-style-type: none"> <li>• Low yield due to use of local variety</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of Powdery mildew and Pod borer</li> <li>• Seed shattering problem during harvesting in local variety China Moong</li> <li>• Moisture stress due to long dry spells in Kharif</li> </ul>	150 ha (25 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Greengram</li> <li>• Training on ICM in Greengram</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
	Bengalgram	<ul style="list-style-type: none"> <li>• Low yield due to cultivation of local varieties</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of pod borer</li> <li>• Incidence of Wilt and Rust</li> </ul>	200 ha (40 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Bengalgram</li> <li>• Training on ICM practices in Bengalgram</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
		<ul style="list-style-type: none"> <li>• Reduced yield due to moisture stress</li> </ul>		<ul style="list-style-type: none"> <li>• FLD on compartmental bund former</li> <li>• Trainings on use of machineries in chickpea cultivation</li> </ul>
	Safflower	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> <li>• Incidence of sucking pests</li> <li>• Incidence of Capsule borer</li> <li>• Incidence of Alternaria leaf spot</li> </ul>	100 ha (50 % of the area)	<ul style="list-style-type: none"> <li>• OFT on Assessment of Annigeri 2020 and ISF-764 varieties in Safflower crop</li> <li>• FLD on ICM practices in ISF-764 variety</li> <li>• Training on ICM practices in Safflower</li> <li>• Supply of literature</li> <li>• Field Day</li> </ul>
	Rabi Sorghum	<ul style="list-style-type: none"> <li>• Low productivity due to use of local variety</li> <li>• Incidence of shoot fly and stem borer</li> </ul>	40 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Rabi Sorghum</li> <li>• Training on ICM practices in Rabi Sorghum</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>



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.)*
		<ul style="list-style-type: none"> <li>• Incidence of smut diseases</li> <li>• Problem of lodging in existing variety</li> </ul>		
	Sunflower	<ul style="list-style-type: none"> <li>• Incidence of Necrosis</li> <li>• Incidence of Red headed caterpillar (RHHC)</li> </ul>	20 ha (50 % of the area)	<ul style="list-style-type: none"> <li>• Training on ICM practices in Sunflower</li> <li>• Supply of literature</li> </ul>
	Red Chilli	<ul style="list-style-type: none"> <li>• Non-availability of quality and pure seeds of Byadgi Dabbi</li> <li>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases</li> </ul>	80 ha. (30% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on ICM in Chilli crop</li> <li>• Training on ICM</li> <li>• Supply of relevant literature</li> <li>• Farm advisory services</li> <li>• Rendering Kisan Mobile Advisory Services to farmers</li> <li>• Field day</li> </ul>
	Onion	<ul style="list-style-type: none"> <li>• Low income due to cultivation of local varieties</li> <li>• Imbalanced nutrition without soil testing</li> <li>• Low keeping quality bulbs in existing variety</li> <li>• High incidence of thrips &amp; purple blotch</li> <li>• High incidence of weeds</li> <li>• High labour requirement in detopping of harvested onion crop</li> </ul>	100 ha. (30% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on introduction of Bhima Super variety along with ICM practices</li> <li>• Trainings on ICM in onion crop</li> <li>• Demonstration of battery operated detopper</li> <li>• Trainings on use of battery operated detopper</li> <li>• Seed production activities with identified seed farmers</li> <li>• Supply of quality seeds of Bhima Super variety</li> <li>• Supply of relevant literature</li> <li>• Field day</li> </ul>
	Rabi crops	<ul style="list-style-type: none"> <li>• Non profitability in existing Rabi crops due to moisture stress during Rabi Season</li> </ul>	80 ha (25% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on introduction of Ashwagandha crop for higher income and drought mitigation</li> <li>• Supply of relevant literature</li> <li>• Field day</li> </ul>
	Rabi crops	<ul style="list-style-type: none"> <li>• Non profitability in existing Rabi crops due to moisture stress during Rabi Season</li> </ul>	80 ha (25% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on introduction of Ajawain crop for higher income and drought mitigation</li> <li>• Supply of relevant literature</li> </ul>

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.)*
				<ul style="list-style-type: none"> <li>• Field day</li> </ul>
	Nutrition and health	<ul style="list-style-type: none"> <li>• Less consumption of fruits and vegetables</li> <li>• Lack of awareness on nutritional importance and value addition of flax seeds</li> <li>• Lack of availability of Omega-3 Fatty acids in vegetarian diet.</li> </ul>	85% families	<ul style="list-style-type: none"> <li>• FLD on Nutri Garden</li> <li>• Training on balanced diet and nutrition</li> <li>• Training on importance of millets in diet</li> <li>• Field day</li> </ul>
	Grain storage	<ul style="list-style-type: none"> <li>• Incidence of stored grain pest</li> </ul>	50% families	<ul style="list-style-type: none"> <li>• FLD on demonstration of Super grain bags</li> <li>• Training on management of stored grain pests</li> <li>• Home visits and interactive meetings</li> <li>• Supply of literature</li> <li>• Supply of super grain bags</li> </ul>
	Millets	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> <li>• Lack of awareness on millet nutrition and value addition</li> </ul>	90% families	<ul style="list-style-type: none"> <li>• Demonstration of HN-46 variety of Foxtail Millet</li> <li>• Training on preparation of millet products</li> <li>• Training</li> <li>• Supply of literature</li> </ul>
<b>Cluster C</b> Akkigund (Laxmeshwar block)	Maize	<ul style="list-style-type: none"> <li>• Imbalanced nutrition</li> <li>• Incidence of Army worm</li> <li>• Drudgery during threshing and winnowing of Maize</li> <li>• Incidence of Turcicum leaf blight and Bacterial stalk rot</li> <li>• High labour requirement for harvesting of maize</li> </ul>	60 ha (90 % of total area)	<ul style="list-style-type: none"> <li>• Trainings on INM practices in Maize</li> <li>• Trainings on use of machineries in maize cultivation</li> <li>• Supply of literature</li> </ul>
	Spreading groundnut	<ul style="list-style-type: none"> <li>• Low productivity in existing local varieties</li> <li>• Imbalanced nutrition</li> <li>• Incidence of leaf minor and leaf spot</li> </ul>	40 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• Trainings on ICM practices in Spreading groundnut</li> <li>• Supply of relevant literature</li> </ul>

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.)*
	Soybean	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> </ul>	20 ha (5% of the area)	<ul style="list-style-type: none"> <li>• FLD on Introduction of KDS-753 variety of Soybean</li> <li>• Trainings</li> <li>• Supply of literature</li> </ul>
	Bt. Cotton	<ul style="list-style-type: none"> <li>• Incidence of pink bollworm</li> <li>• Problem of leaf reddening</li> <li>• Incidence of sucking pests</li> </ul>	40 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• Training on use of Splat pheromone technique to control pink bollworm and method demonstration</li> <li>• Training on ICM practices in cotton</li> </ul>
		<ul style="list-style-type: none"> <li>• Drudgery of operation in existing spraying methods</li> </ul>	120 ha (80 % of total area)	<ul style="list-style-type: none"> <li>• Trainings on use of machineries in Bt. Cotton cultivation</li> </ul>
	Greengram	<ul style="list-style-type: none"> <li>• Low yield due to use of local variety</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of Powdery mildew and Pod borer</li> <li>• Seed shattering problem during harvesting in local variety China Moong</li> <li>• Moisture stress due to long dry spells in Kharif</li> </ul>	80 ha (50 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Greengram</li> <li>• FLD on Compartmental Bund Former</li> <li>• Training on ICM in Greengram</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
	Blackgram	<ul style="list-style-type: none"> <li>• Low yield due to use of local varieties</li> <li>• Incidence of Powdery mildew</li> <li>• Incidence of pod borer</li> </ul>	30 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• OFT of high yielding varieties of Blackgram</li> <li>• Training on ICM practices in Blackgram</li> <li>• Supply of literature</li> </ul>
	Bengalgram	<ul style="list-style-type: none"> <li>• Low yield due to cultivation of local varieties</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of pod borer</li> <li>• Incidence of Wilt and Rust</li> </ul>	100 ha (25 % of the area)	<ul style="list-style-type: none"> <li>• Training on natural farming practices in Bengalgram</li> <li>• FLD on demonstration of solar nipping machine in Bengalgram</li> <li>• Trainings on use of machineries in Bengalgram cultivation</li> <li>• Supply of literature</li> </ul>

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.)*
		<ul style="list-style-type: none"> <li>• Non profitability due to no nipping</li> <li>• Drudgery of operation involved in manual nipping of Bengalgram</li> </ul>		<ul style="list-style-type: none"> <li>• Field day</li> </ul>
	Wheat	<ul style="list-style-type: none"> <li>• Low productivity due to use of local varieties</li> <li>• Incidence of termites and stem borer</li> <li>• Incidence of rust and leaf spot</li> </ul>	20 ha (10 % of the area)	<ul style="list-style-type: none"> <li>• Training on ICM practices in Wheat</li> <li>• Supply of literature</li> </ul>
	Rabi Sorghum	<ul style="list-style-type: none"> <li>• Incidence of Shoot fly and Stem borer</li> <li>• Incidence of Smut disease</li> </ul>	20 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Rabi Sorghum</li> <li>• Training on ICM practices in Rabi Sorghum</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>
	Millets	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> <li>• Lack of awareness on millet nutrition and value addition</li> </ul>	90% families	<ul style="list-style-type: none"> <li>• FLD on introduction of HN-46 variety of Foxtail Millet</li> <li>• Training on preparation of millet products</li> <li>• Training</li> <li>• Supply of literature</li> </ul>
	Rabi crops	<ul style="list-style-type: none"> <li>• Non profitability in existing farming system due to moisture stress during Rabi season</li> </ul>	90 ha (40% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on introduction of Ashwagandha crop for higher income and drought mitigation</li> <li>• Supply of relevant literature</li> </ul>
	Borewell	<ul style="list-style-type: none"> <li>• Decreased ground water level and less water availability for irrigation</li> </ul>	35 ha. (25%)	<ul style="list-style-type: none"> <li>• Training on recharge of ground water through borewell</li> <li>• Field visits to demonstration units of artificial recharge of ground water through borewell</li> <li>• Supply of literature</li> </ul>
	Milch cattle	<ul style="list-style-type: none"> <li>• Low productivity of milk due to non-availability of green fodder throughout the year.</li> </ul>	75 Nos.	<ul style="list-style-type: none"> <li>• Training on scientific management of milch cattle</li> <li>• Supply of literature</li> <li>• Field visit</li> <li>• Mobile advisory services</li> </ul>

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.)*
				<ul style="list-style-type: none"> <li>• Field day</li> <li>• Animal health camps in collaboration with Department of Animal Husbandry</li> </ul>
	Goat	<ul style="list-style-type: none"> <li>• Low body weight in kids</li> </ul>	200 Nos.	<ul style="list-style-type: none"> <li>• Training on scientific management of goats</li> </ul>
	Nutrition and health	<ul style="list-style-type: none"> <li>• Less consumption of fruits and vegetables</li> <li>• Lack of awareness on nutritional importance and value addition of flax seeds</li> <li>• Lack of availability of Omega-3 Fatty acids in vegetarian diet.</li> </ul>	85% families	<ul style="list-style-type: none"> <li>• FLD on Nutri Garden</li> <li>• Training on balanced diet and nutrition</li> <li>• Training on importance of millets in diet</li> <li>• Field day</li> </ul>
	Grain storage	<ul style="list-style-type: none"> <li>• Incidence of stored grain pest</li> </ul>	50% families	<ul style="list-style-type: none"> <li>• FLD on demonstration of Super grain bags</li> <li>• Training on management of stored grain pests</li> <li>• Home visits and interactive meetings</li> <li>• Supply of literature</li> <li>• Supply of super grain bags</li> </ul>
<b>Cluster D</b> Muganur (Naragund block)	Maize	<ul style="list-style-type: none"> <li>• Imbalanced nutrition</li> <li>• Application of excess Nitrogen</li> <li>• Incidence of Army worm</li> <li>• Drudgery during threshing and winnowing of Maize</li> <li>• Incidence of Turcicum leaf blight and Bacterial stalk rot</li> <li>• High labour requirement for harvesting of maize</li> </ul>	150 ha (30 % of the area)	<ul style="list-style-type: none"> <li>• Trainings on INM practices in maize</li> <li>• Supply of literature</li> </ul>
	Greengram	<ul style="list-style-type: none"> <li>• Low yield due to use of local variety</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of Powdery mildew and Pod borer</li> <li>• Seed shattering problem</li> </ul>	100 ha (50 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Greengram</li> <li>• Training on ICM in Greengram</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>

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.)*
		during harvesting in local variety China Moong <ul style="list-style-type: none"> <li>• Moisture stress due to long dry spells in Kharif</li> </ul>		
	Wheat	<ul style="list-style-type: none"> <li>• Low productivity due to use of local varieties</li> <li>• Incidence of stem borer</li> <li>• Incidence of rust and leaf spot</li> </ul>	40 ha (20 % of the area)	<ul style="list-style-type: none"> <li>• Training on ICM practices in wheat</li> <li>• Supply of literature</li> </ul>
	Bengalgram	<ul style="list-style-type: none"> <li>• Low yield due to cultivation of local varieties</li> <li>• Imbalanced nutrition and high cost of cultivation</li> <li>• Low yield due to incidence of pod borer</li> <li>• Incidence of Wilt and Rust</li> <li>• Non profitability in existing farming system due to moisture stress</li> <li>• Deterioration of soil physical properties due to unscientific use of machineries</li> <li>• Reduced Water Use Efficiency</li> <li>• Non profitability due to nipping</li> <li>• Drudgery of operation involved in manual nipping of Bengalgram</li> </ul>	50 ha (40 % of the area)	<ul style="list-style-type: none"> <li>• OFT on assessment of high yielding varieties in Bengalgram crop</li> <li>• OFT on conservation agriculture practices in Bengalgram preceded by Maize</li> <li>• FLD on Solar nipping machine</li> <li>• Training on natural farming practices in Bengalgram</li> <li>• Training on resource conservation technologies in Bengalgram cultivation</li> <li>• Trainings on use of machineries in Bengalgram cultivation</li> <li>• Field day</li> <li>• Supply of literature</li> </ul>
	Rabi Sorghum	<ul style="list-style-type: none"> <li>• Incidence of Shoot fly and Stem borer</li> <li>• Incidence of Smut disease</li> </ul>	25 ha (40 % of the area)	<ul style="list-style-type: none"> <li>• FLD on ICM practices in Rabi Sorghum</li> <li>• Training on ICM practices in Rabi Sorghum</li> <li>• Supply of literature</li> <li>• Field day</li> </ul>

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.)*
	Safflower	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of local variety</li> <li>• Incidence of sucking pests</li> <li>• Incidence of Capsule borer</li> <li>• Incidence of Alternaria leaf spot</li> </ul>	50 ha (50 % of the area)	<ul style="list-style-type: none"> <li>• Training on ICM practices in Safflower</li> <li>• Supply of literature</li> <li>• Field Day</li> </ul>
	Red Chilli	<ul style="list-style-type: none"> <li>• Non-availability of quality and pure seeds of Byadgi Dabbi</li> <li>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases</li> <li>• Unhygienic way of drying of Red Chillies</li> </ul>	120 ha (30% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on ICM in Chilli crop</li> <li>• Training on ICM</li> <li>• Supply of relevant literature</li> <li>• Farm advisory services</li> <li>• Field day</li> <li>• Seed production activities with identified seed farmers</li> </ul>
	Onion	<ul style="list-style-type: none"> <li>• Low productivity due to imbalanced nutrition</li> <li>• Low productivity due to cultivation of low yielding variety Double Red</li> <li>• Incidence of thrips reduces the yields</li> <li>• High labour requirement in detopping of harvested onion crop</li> </ul>	120 ha (30% of the rainfed area)	<ul style="list-style-type: none"> <li>• FLD on introduction of Bhima Super variety along with ICM practices</li> <li>• Trainings on ICM in onion crop</li> <li>• Demonstration of battery operated onion detopper</li> <li>• Trainings on use of battery operated onion detopper</li> <li>• Seed production activities with identified seed farmers</li> <li>• Supply of quality seeds of Bhima Super variety</li> <li>• Supply of relevant literature&amp;Field day</li> </ul>
	Milch cattle	<ul style="list-style-type: none"> <li>• Low productivity of milk due to non-availability of green fodder throughout the year.</li> </ul>	45 Nos.	<ul style="list-style-type: none"> <li>• Training on scientific management of milch cattle</li> <li>• Supply of literature</li> <li>• Field visit &amp; Mobile advisory services</li> <li>• Field day</li> <li>• Animal health camps in collaboration with Department of Animal Husbandry</li> </ul>

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.)*
	Nutrition and health	<ul style="list-style-type: none"> <li>• Less consumption of millets, fruits and vegetables in daily diet</li> </ul>	85% families	<ul style="list-style-type: none"> <li>• FLD on Nutri Garden</li> <li>• Training on health and nutrition, importance of millets in diet</li> <li>• Field day</li> </ul>
	Grain storage	<ul style="list-style-type: none"> <li>• Incidence of stored grain pest</li> </ul>	50% families	<ul style="list-style-type: none"> <li>• FLD on demonstration of Super grain bags</li> <li>• Training on management of stored grain pests</li> <li>• Home visits and interactive meetings</li> <li>• Supply of literature</li> <li>• Supply of super grain bags</li> </ul>
	Millets	<ul style="list-style-type: none"> <li>• Lack of awareness on millet nutrition and value addition</li> </ul>	90% families	<ul style="list-style-type: none"> <li>• Training on preparation of millet products</li> <li>• Supply of literature</li> </ul>



## 5. Technology assessment during 2023-24

SI 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	Bengalgram	<ul style="list-style-type: none"> <li>Productivity of JG-11 variety is low</li> <li>Problem of wilt in this variety JG-11</li> </ul>	Assessment of production potential of different Bengalgram varieties	<u>Farmers Practice:</u> JG-11	-	-	-	-	5	42800	<ul style="list-style-type: none"> <li>Plant height (cm)</li> <li>Height of first Pod (cm)</li> <li>No. of pods per plant</li> <li>Height of cut for mechanical harvesting (cm)</li> <li>Shattering losses due to mechanical harvesting (%)</li> <li>Test weight (g)</li> <li>Grain yield (q/ha)</li> <li>Duration of crop (Days)</li> <li>Incidence of wilt (%)</li> <li>Incidence of rust (%)</li> </ul>	SMS (Agronomy)
				<u>Technology Option 1:</u> JAKI-9218	UAS, Dharwad	Seeds (JAKI-9218)	20 Kg	2000				
				<u>Technology Option 2:</u> DBGV-204	UAS, Dharwad	Seeds (DBGV-204)	20 Kg	2000				
				<u>Technology Option 3:</u> NBeG-49	PJTSAU, Hyderabad	Seeds (NBeG-49)	20 Kg	2000				
				<u>Technology Option 4:</u> Phule Vikram	MPKV, Rahuri	Seeds (Phule Vikram)	20 Kg	2000				
				<b>Other inputs</b>								
				Trichoderma		800 gm	160					
Rhizobium		2 Kg	200									
PSB		2 Kg	200									
						<b>Total</b>	<b>8560</b>					
5.2	Bengalgram	<ul style="list-style-type: none"> <li>Deterioration of soil physical properties</li> </ul>	Assessment of conservation agriculture practices in	<u>Farmers' Practice</u> Sowing of chickpea following					3	21300	<ul style="list-style-type: none"> <li>Yield (Qtl/ha)</li> <li>Soil moisture content (%)</li> <li>Soil Bulk Density</li> </ul>	SMS (Ag. Engg.)

SI 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
		due to repeated use of machineries • High cost of cultivation	Bengalgram after harvest of Maize	conventional tillage (Harrowing and rotavator operation twice) after Maize crop harvest							(kg/cm <sup>3</sup> ) • Economics	
				<u>Technology Option 1</u> Direct sowing of chickpea after single pass blade harrow operation after harvest with combine harvester	PAU, Ludhiana	Seeds (JAKI 9218)	15 Kg	1500				
						Chickpea magic	1.5 Kg	550				
						Farm machinery hiring cost (Tractor with Blade harrow + Seed drill)	2 hours	2000				
				<u>Technology Option 2</u> Sowing of chickpea in single pass Rotavator operation after harvest of Maize with combine harvester	PAU, Ludhiana	Seeds (JAKI 9218)	15 Kg	1500				
						Chickpea magic	1.5 Kg	550				
						Farm machinery hiring cost (Tractor with Seed drill)	2 hours	1000				
							<b>Total</b>	<b>7100</b>				

SI 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	Blackgram	Low productivity due to cultivation of local variety	Assessment of Production potential of different Blackgram varieties under rainfed condition	<u>Farmers practice:</u> Local variety	-	-	-	-	3	13950	<ul style="list-style-type: none"> <li>Plant height (cm)</li> <li>No. of pods per plant</li> <li>Test weight (gm)</li> <li>Grain yield(q/ha)</li> <li>Incidence of powdery mildew (%)</li> </ul>	SMS (Agronomy)
				<u>Technology Option 1:</u> DBGV-5	UAS, Dharwad	Seeds (DBGV-5)	7 Kg	1000				
				<u>Technology Option 2:</u> BDU-12	UAS, Raichur	Seeds (BDU-12)	7 Kg	1750				
				<u>Technology Option 3:</u> LBG-791	UAS, Bengaluru	Seeds (LBG-791)	7 Kg	1750				
				<b>Other inputs</b>								
					Trichoderma	50 gm	20					
					Rhizobium	200gm	30					
	PSB	500gm	100									
						<b>Total</b>	<b>4650</b>					
5.4	Safflower	Low productivity due to cultivation of local variety	Assessment of different Safflower varieties for their productivity under rainfed condition	<u>Farmers Practice:</u> A-1	-	-	-	-	3	3150	<ul style="list-style-type: none"> <li>Plant height (cm)</li> <li>No. of branches per plant</li> <li>No. of capsules per plant</li> <li>Duration (Days)</li> <li>Yield (q/ha)</li> <li>Incidence of leaf spot (%)</li> </ul>	SMS (Agronomy)
				<u>Technology Option 1:</u> ISF-764	ICAR-IIOR, Hyderabad	Seeds (ISF-764)	3.5 Kg	350				
				<u>Technology Option 2:</u> A-2020	UAS, Dharwad	Seeds (A-2020)	3.5 Kg	350				
				<u>Technology Option 3:</u> Annigeri Gold	UAS, Dharwad	Seeds (Annigeri Gold)	3.5 Kg	350				

SI 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	Okra	Existing hybrids are low yielding and resulting in low income	Assessment of high yielding okra hybrids for higher productivity	<i>Farmers' Practice</i> Cultivation of private hybrids					3	19050	<ul style="list-style-type: none"> <li>•Yield (Qtl/ha) and economics</li> <li>•PDI (%)</li> <li>•Plant height &amp; Duration of the crop</li> <li>•Market preference</li> <li>•Rate per Kg or Quintal</li> </ul>	SMS (Horticulture)
				<i>Technology Option 1</i> CoBH-4	TNAU, Tamilnadu	Seeds: CoBH-4	1 Kg	2500				
						Arka vegetable Special	1Kg	200				
				<i>Technology Option 2</i> Arka Nikita	ICAR-IIHR, Bengaluru	Seeds : Arka Nikita	1 Kg	2500				
						Arka Vegetable Special	1Kg	200				
				<i>Technology Option 3</i> Phule Vimukta	MPKV, Rahuri	Seeds: Phule Vimukta	1 Kg	750				
		Arka Vegetable Special	1 Kg	200								
							<b>Total</b>	<b>6350</b>				
							<b>Total of OFTs</b>		<b>17</b>	<b>100250</b>		

## 6. Frontline demonstrations during 2023-24

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	<ul style="list-style-type: none"> <li>• Low productivity in existing M 35-1 variety</li> <li>• Moisture stress</li> </ul>	Demonstration of BJV-44 variety in Rabi Sorghum crop	BJV-44	-	UAS, Dharwad	Seeds (BJV-44)	3 Kg	240	20	11400	<ul style="list-style-type: none"> <li>• Yield (Qtl/ha)</li> <li>• % of lodging</li> <li>• Organoleptic evaluation</li> </ul>	SMS (Agronomy) & SMS (Home Science)
								Azospirillum	200 gm	30				
								PSB	200 gm	30				
								CaCl <sub>2</sub>	100 gm	20				
								ZnSO <sub>4</sub>	1.5 Kg	150				
								FeSO <sub>4</sub>	1.5 Kg	100				
								<b>Total</b>		<b>570</b>				
6.2	Millets	Foxtail millet	Low productivity due to cultivation of local variety	Demonstration of HN-46 variety of Foxtail Millet	HN-46	-	UAS, Dharwad	Seeds (HN-46)	3	450	3	1350	<ul style="list-style-type: none"> <li>• Yield (Qtl/ha)</li> <li>• Height of plant (cm)</li> <li>• Length of cob (cm)</li> </ul>	SMS (Agronomy) & SMS (Home Science)
6.3	Oilseeds	Safflower	<ul style="list-style-type: none"> <li>• Low productivity due to cultivation of</li> </ul>	Demonstration of ICM practices	ISF-764	-	ICAR-IIOR, Hyderabad	Seeds (ISF-764)	3.5 Kg	350	10	3800	<ul style="list-style-type: none"> <li>• No. of capsules per plant</li> <li>• Duration</li> </ul>	SMS (Agronomy)

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
			local variety • Imbalanced nutrition • Incidence of sucking pests • Incidence of Capsule borer • Incidence of Leaf spot	in high yielding ISF-764 variety of Safflower				Azospirillum	200 gm	30			(Days) • Yield (q/ha) • Incidence of leaf spot (%)	
								<b>Total</b>		<b>380</b>				
		Soybean	Low productivity due to cultivation of local variety	Demonstration of KDS-753 variety in Soybean	KDS-753	-	MPKV, Rahuri	Seeds (KDS-753)	25 Kg	3750	3	<b>11250</b>	• Plant height (Cm) • No. of tillers • Yield (Qtl/ha)	SMS (Agronomy)
		Summer Groundnut	Low yield due to imbalanced nutrition	INM in Summer Groundnut	-	-	UAS, Dharwad	Rhizobium (Liquid form) PSB (Liquid form) Zinc Sulphate Ferrous Sulphate	100 ml 100 ml 10 Kg 10 Kg	50 50 1000 600	6	<b>16200</b>	• Soil fertility status before and after • Yield (Qtl/ha)	SMS (Soil Science) & SMS (Agronomy)

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
								Gypsum	200 Kg	1000			• Test weight (gm)	
									<b>Total</b>	<b>2700</b>				
		Summer Groundnut	<ul style="list-style-type: none"> <li>• High labour and time requirement in manual harvesting method</li> <li>• Pod damage in harrowing method</li> </ul>	Demonstration of Tractor operated Groundnut Digger Cum Elevator	-	-	TNAU, Coimbatore	Tractor with Groundnut Digger Cum Elevator	2 hours	1200	10	<b>12000</b>	<ul style="list-style-type: none"> <li>• Digging efficiency (%)</li> <li>• Area coverage (Ha/h)</li> <li>• Labour requirement (Man-h/ha)</li> <li>• Saving in time and cost (%)</li> <li>• Economics</li> </ul>	SMS (Ag. Engineering) & SMS (Agronomy)
6.4	Pulses	Green-gram	<ul style="list-style-type: none"> <li>• Low yield due to cultivation of local varieties</li> <li>• Incidence of Yellow Mosaic Virus</li> </ul>	Demonstration of DGGV-2 variety in Greengram crop and easy facilitatio	DGGV-2	-	UAS, Dharwad	Seeds (DGGV-2)	5 Kg	500	30		<ul style="list-style-type: none"> <li>• Plant height (cm)</li> <li>• No. of pods per plant</li> <li>• Yield (q/ha)</li> </ul>	SMS (Agronomy)
								Rhizobium	200 gm	30				
								PSB	500 gm	100				
								Pulse Magic	2 Kg	550				

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
			and Pod borer • Incidence of Powdery mildew • Seed shattering problem during harvesting • Moisture Stress	n of machine harvesting by shedding leaves at harvest through spray of Paraquat herbicide					<b>Total</b>	<b>1180</b>		35400		
								Paraquat (For 3 demos)	1 ltr	1000		3000		
										<b>2180</b>		<b>38400</b>		
		Bengal gram	• Low yield in existing local varieties • Incidence of pod borer • Incidence of wilt and rust	Demonstration of ICM practices in JAKI-9218 variety of Bengal gram crop	JAKI-9218	-	UAS, Dharwad	Seeds (JAKI-9218)	20 Kg	1800	25	<b>74750</b>	• Plant height (cm) • No. of pods per plant • Yield (q/ha) • Incidence of wilt (%)	SMS (Agronomy) & SMS (Ag. Extn.)
							Trichoderma	100 gm	40					
							Rhizobium	500 gm	100					
							PSB	500 gm	100					
							Chickpea magic	1.5 Kg	550					
							Pheromone traps	4 No.	400					
								<b>Total</b>		<b>2990</b>				
		Bengal gram	• Low productivity due to moisture stress	Tractor operated compartmental bund former	-	-	UAS, Raichur	Tractor operated compartmental bund former (Hiring basis)	1 hour	1000	20	<b>20000</b>	• Yield (Qtls) • Soil moisture content (%)	SMS (Ag. Engg.)
								<b>Total</b>	<b>1000</b>					



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	<ul style="list-style-type: none"> <li>Non profitability due to no nipping</li> <li>High labour and time consumption in hand nipping method</li> </ul>	Solar nipping machine	-	-	UAS, Raichur	Solar nipping machine	1 unit	9000	10	9000	<ul style="list-style-type: none"> <li>Yield (Qtls)</li> <li>No. of pods per plant</li> <li>Number of branches</li> </ul>	SMS (Ag. Engg.)
6.5	Commercial crops													
6.6	Horticultural crops	Onion	<ul style="list-style-type: none"> <li>Low income due to cultivation of local varieties Double red &amp; Bellary red</li> <li>High labour requirement and drudgery of operation in manual detopping of harvested onions</li> </ul>	<ul style="list-style-type: none"> <li>Demonstration of ICM in Red onion variety Bheema Super</li> <li>Battery operated Onion detopper (ICM in Onion)</li> </ul>	Bhima Super	-	ICAR-DOGR, Pune	Bhima Super seeds Gypsum Vegetable Special <b>TOTAL</b>	1 Kg 66 Kg 2 Kg <b>3230</b>	2500 330 400 <b>3230</b>	12	38760 3500	<ul style="list-style-type: none"> <li>Yield (Qtls) and income (Rs./ha)</li> <li>Pest (Nos.) and disease incidence (%)</li> <li>Bulb weight (gms)</li> <li>Labour requirement for detopping (Nos.)</li> </ul>	SMS (Horticulture), SMS (Ag. Engg.) & SMS (Soil Science)
										<b>Total</b>		<b>42260</b>		
		Red Chilli	<ul style="list-style-type: none"> <li>Non-availability of quality and</li> </ul>	ICM in Byadgi Chilli	Byadgi Dabbi	-	IIHR, Bengaluru and UHS,	Pure seeds of Byadgi Chilli Yellow / Blue	1 Kg 16	3500 960	10	<b>54200</b>	<ul style="list-style-type: none"> <li>Yield (Qtl/ha)</li> <li>Disease</li> </ul>	SMS (Horticulture) & SMS (Home

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		
			<p>pure seeds of Byadagi Dabbi</p> <ul style="list-style-type: none"> <li>• High incidence of sucking pests leading to murda complex disease &amp; anthracnose disease</li> <li>• Lack of proper knowledge on ICM practices resulting in poor productivity and quality</li> <li>• Improper post-harvest management</li> </ul>				Bagalkot	sticky traps					index (%) • Pest incidence	Science)		
							Arka Vegetable Special	2 Kg	400							
							Beauveria bassiana	1 kg	280							
							Lecanicillium lecanii	1 kg	280							
								<b>Total</b>		<b>5420</b>						
	Horticultural crops	Vegetables	Low productivity and income due to non-availability of improved	Introduction of new varieties in vegetable crops of ICAR-IIHR,	Ridgegourd- Arka Prasan Dolichos Bean –	-	IIHR, Bengaluru & UHS, Bagalkot	Seeds of Ridgegourd	400 gm	1100	10	<b>59500</b>	<ul style="list-style-type: none"> <li>• Yield (Qtl/ha)</li> <li>• Income (Rs./ha)</li> </ul>	SMS (Horticulture)		
							Dolichos Bean	4 Kg	1500							
							Spinach	2.5 Kg	950							
							Radish	1 Kg	1200							

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
			vegetable varieties	Bengaluru & UHS, Bagalkot	Arka Amogh			Cucumber	40 gms	400				
								Drumstick	20 seedlings	400				
					Spinach – Arka Anupama			Vegetable Special	2 Kg	400				
					<b>TOTAL</b>					<b>5950</b>				
					Radish – Arka Nishant									
					Cucumber- Arka Veera									
					Drumstick - Bhagya									
		Ashwagandha	<ul style="list-style-type: none"> <li>Non profitability in existing cropping pattern due to vagaries of Monsoon and lack of crop diversification in field crops resulting in income</li> </ul>	FLD on introduction of Ashwagandha crop	Poshita	-	CSIR-CIMAP, Lucknow, UP	Seeds	4 Kg	1200	5	<b>6000</b>	<ul style="list-style-type: none"> <li>Yield (Qtl/ha) and economics</li> <li>Root length &amp; diameter</li> <li>Fresh and dry Root weight (gms)</li> </ul>	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
			insecurity to the farmers • Lack of knowledge on alternate cropping system and crop diversification to sustain vagaries of Monsoon											
		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 • Lack of knowledge	FLD on introduction of Ajwain crop	Ajmer Ajwain-1	-	ICAR-NRC on seeds spices, Ajmer, Rajasthan	Seeds	2 Kg	700	3	<b>2100</b>	• Days taken for 50% flowering • 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
			on alternate cropping system and crop diversification to sustain vagaries of Monsoon.											
		Sheep	Low returns due to low body weight gain	Feeding of bypass protein and bypass fat with deworming in lambs to improve weight gain	-	-	KVAFSU, Bidar	Feed supplementation of bypass protein and bypass fat	3 Kg	800	10	<b>8500</b>	<ul style="list-style-type: none"> <li>• Body weight gain</li> <li>• Mortality (%)</li> </ul>	Prog. Asst. (Animal Science)
							Albendazole (30 ml)	1	50					
								<b>Total</b>		<b>850</b>				
		Milch Cattle	Delayed maturity in CB Calves	Feeding of calf starter with deworming in CB calves to attain early maturity	-	-	KVAFSU, Bidar	Calf starter	9 Kg	2400	10	<b>26500</b>	<ul style="list-style-type: none"> <li>• Body weight gain</li> <li>• Age of maturity</li> </ul>	Prog. Asst. (Animal Science)
							Albendazole (30 ml)	5	250					
								<b>Total</b>		<b>2650</b>				

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
6.8	Fisheries													
6.9	Others													
		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 • Shelf life	SMSs (Home Science) & SMS (Ag. Extn.)
<b>Total of FLDs</b>											<b>237</b>	<b>403210</b>		

### 7. Trainings for farmers/ farm women during 2023-24

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	ICM practices in Greengram	2	50	SMS (Agronomy)
		Blackgram	OFT	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	FLD	ICM practices in Maize	2	50	SMS (Agronomy) SMS (Soil Science)
		Cotton	OFT	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)

SI.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
							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	FLD & Others	ICM in Red Onion crop	3	60	SMSs (Horticulture)& Soil Science)
		Chilli	FLD	ICM in Chilli crop	2	40	SMSs (Horticulture& Soil Science)
		Vegetable crops	FLD	ICM in vegetable crops	4	80	SMS (Horticulture)
		Dryland horticulture	Others	Promotion of dryland horticulture	2	40	SMS (Horticulture)
		Onion	FLD	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	Others	<ul style="list-style-type: none"> <li>Promotion of fodder production technologies for getting higher milk productivity in dairy animals</li> <li>Silage preparation and its importance</li> </ul>	2	60	Programme Assistant (Animal Husbandry)
		Poultry birds	Others	<ul style="list-style-type: none"> <li>Scientific management of poultry birds</li> </ul>	1	20	Programme Assistant (Animal Husbandry)
		Sheep and goat	Others	<ul style="list-style-type: none"> <li>Scientific management of Sheep and goat</li> </ul>	2	50	ProgrammeAssistant (Animal Husbandry)

SI.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
7.4	Home Science	Nutrition	FLD	Importance of protective foods and Nutrition Garden	4	80	SMS (Home Science)
		Drudgery	Others	Drudgery reducing equipments	4	80	SMS (Home Science)
		Grain storage	FLD	Grain storage	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	4	120	SMSs (Home Science & Agronomy)
			Others	Training on Nutritional importance of flax seed and value addition	4	120	SMS (Home Science)
			EDP	Value added products, packing, marketing and licensing of millet / Chilli products	2	10	SMS (Home Science)
			Others	Preparation of Jam, mixed pickles and tomato products	4	80	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)
		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)



SI.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
		Integrated Farming System	Others	Integrated Farming System for FPO members	2	40	SMS (Agronomy & Ag. Extension)
7.10	Farm mechanization	Maize and Chickpea	OFT	Adoption of conservation agriculture practices in Maize-Chickpea cropping system	2	50	SMS (Ag. Engg.)& SMS (Agronomy)
		Chickpea	FLD	Use of compartmental bund former for moisture conservation	2	35	SMS (Ag. Engg.)& SMS (Soil Science)
			FLD	Operation of solar nipping machine	2	50	SMS (Ag. Engg.)& SMS (Agronomy)
		Summer Groundnut	OFT	Mechanization in Groundnut harvesting	2	40	SMS (Ag. Engg.)& SMS (Ag. Extn.)
		Bt. Cotton	OFT	Mechanized spraying in Bt. Cotton	2	75	SMS (Ag. Engg.)
		Onion	FLD	Drudgery reduction in Onion detopping operation	2	50	SMS (Ag. Engg.)& SMS (Horticulture)
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	1	20	SMS (Agronomy & 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

SI.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
7.16	Others, pl. specify	Artificial recharging of groundwater through borewell	Others	Technology on recharging of ground water through borewell	1	30	SMSs (Soil Science & Agronomy)
		All field crops	Others	Usage of Organic Manure & Green Manure crops to enhance moisture holding capacity	2	50	SMSs (Soil Science & Agronomy)
				<b>Total</b>	<b>109</b>	<b>2355</b>	

## 8. Training for rural youth during 2023-24

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)
		Natural farming	Skill Development	Production of inputs for ecological health and benefits under Natural Farming	1	20	SMS (Agronomy) SMS(Soil science) SMS (Horticulture)
8.2	Horticulture production	Dryland Horticulture	Skill Development	Dryland Horticulture	1	10	SMS (Horticulture)
		Coconut	Skill Development	Use of Coconut tree climber for drudgery reduction	1	5	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	15	SMS (Agronomy)
8.6	Production of inputs at site	Jeevamruta production	Skill Development	Jeevamruta preparation & usage	1	10	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	10	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	Millets	EDP	Millet value addition	1	10	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 Tractor and 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 cultivation	1	10	SMS (Home Science)
8.13	Agro forestry	Forestry crops	Others	Promotion of agro forestry for income security in dry land	1	10	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						
			<b>Total</b>		<b>26</b>	<b>450</b>	

### 9. Training for extension personnel during 2023-24

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) SMS (Soil Science)
9.2	Home Science				
	Millets Nutrition	Millet Nutrition Nutrition Garden – It's importance and layout	8	250	SMS (Home Science)
9.3	Capacity building and group dynamics	Formation and functioning of Farmers' Producer Organisation	1	25	SMS (Ag. Extension)
9.4	Horticulture	Advances in horticulture crops	1	10	SMS (Horticulture)
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	Micro irrigation system for effective water management	1	25	SMS (Ag. Engg.) &SMS (Soil Science)
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) SMS (Soil Science)
	Natural farming	Crop production technologies in different crops under natural farming	1	25	SMS (Agronomy) SMS (Soil Science)
		<b>Total</b>	<b>18</b>	<b>480</b>	

## 10. Vocational trainings during 2023-24

SI.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 / ATMA	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	10	50	AH & VS Dept., ASF, ZP etc	Programme Assistant (Animal Husbandry)
		Scientific management of poultry birds	1	10	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						
	Small scale processing and value addition	Operation and maintenance of machinaries for primary processing of seeds	1	2	30	-	SMS (Ag. Engg.)
		<b>Total</b>	<b>12</b>		<b>305</b>		

### 11.Sponsored trainings during 2023-24

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	Krishi Sakhi	4	6	120	KSRLM	SMS (Home Science)
		Solid waste management	4	5	120	KSRLM	SMS (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	7	35	ATMA	SMS (Ag. Engg. & Agronomy)
11.8	PHT and value addition	Value addition to agriculture crops	1	1	40	KSDA	SMS (Home Science)
		Value addition to horticulture crops	1	1	40	KSDH	SMS (Home Science)
11.9	Production of inputs at site						
11.10	Sericulture						
11.11	Fisheries						
11.12	Others, pl. specify						
<b>Total</b>			<b>13</b>		<b>405</b>		

## 12. Extension activities during 2023-24

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	Kisangosthies	2	200	All staff
12.6	Film shows	10	410	All staff
12.7	Self -Help Groups (SHGs) meetings	10	200	SMS (Home Science)
12.8	KisanMelas	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



Sl.No.	Extension activity	No. of activities	Targeted number of participants	Names of the team members involved
	Popular articles	5	-	All staff
	Bi-monthly meeting	5	50	All staff
	Animal health camp	2	100	Programme Assistant (Animal Husbandry)
	<b>Total</b>	<b>1990</b>	<b>27435</b>	

### 13. Activities proposed as knowledge and resource centre during 2023-24

#### 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 2023-24 (q)	Number planned to be produced during 2023-24	Names of the team members involved
13.2.1	Seeds	Farmers' FPOs	Onion	5	-	SMS(Horticulture) & Farm Manager
		Farmers' FPOs	Greengram	20	-	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	250	-	SMS(Soil Science) & Farm Manager
			Vermiwash	600 lit	-	
			Earthworms	2.0	-	
			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	<ul style="list-style-type: none"> <li>• Role of macro &amp; micro nutrients in crop production</li> <li>• In-situ soil &amp; water conservation practices</li> <li>• Natural farming practices</li> </ul>	SMS (Soil Science)
		<ul style="list-style-type: none"> <li>• Pod borer identification and management in Greengram</li> <li>• Powdery mildew identification and management in Greengram</li> <li>• Identification and management of different sucking pests in Cotton</li> <li>• Identification and management of different boll worms in Cotton</li> <li>• Black arm and Alternaria leaf spot management in Cotton</li> <li>• Nutrient management in Maize</li> <li>• Chemical weed management in Maize</li> <li>• Identification and management of Armyworm in Maize</li> <li>• Turcicum leaf blight management in Maize</li> <li>• Identification and management of leaf minor and leaf spot in Groundnut</li> <li>• Management of Root grub in Groundnut</li> <li>• Management of Tikka disease in Groundnut</li> <li>• Podborer and wilt management in Bengalgram</li> <li>• Low cost technologies to increase productivity in Bengalgram</li> <li>• Management of Capsule borer and Leaf spot in Safflower</li> <li>• Management of Necrosis and RHHC in Sunflower</li> <li>• Management of Powdery mildew and pod borer in Blackgram</li> <li>• Stem borer, termites, rust and leafspot management in Wheat</li> <li>• Seed priming with CaCl<sub>2</sub> for Rabi Sorghum</li> <li>• Shoot fly, stem borer and army worm management in Rabi Sorghum</li> <li>• Organic input production technologies</li> <li>• Contingent crop planning</li> <li>• Natural Farming</li> <li>• Foliar spray of KNO<sub>3</sub> for drought tolerance</li> <li>• Use of nano-fertilizers as foliar spray in different crops</li> </ul>	SMS (Agronomy)

	Category	Technological capsules / Number	Names of the team members involved
		<ul style="list-style-type: none"> <li>• Chemical weed management</li> <li>• Seed priming with CaCl<sub>2</sub> for Rabi Sorghum</li> <li>• Opening of conservation furrow for moisture conservation</li> <li>• Compartment bunding for soil moisture conservation</li> <li>• Nipping in Bengalgram&amp;Redgram and its importance</li> <li>• Contingent crop planning</li> <li>• Foliar spray of KNO<sub>3</sub> for drought tolerance</li> </ul>	SMS (Agronomy)
	Horticulture	<ul style="list-style-type: none"> <li>• Onion thrips and purple blotch identification and management</li> <li>• Chillimurda complex identification and management</li> <li>• Weed management in Onion</li> <li>• Nutrient management in fruit crops</li> <li>• Orchard management in Cashew crop</li> <li>• Chilli pest and disease management</li> <li>• Mango pest and disease management</li> <li>• Ashwagandha crop as boon for drought proofing</li> </ul>	SMS (Horticulture)
	Agricultural Engineering	<ul style="list-style-type: none"> <li>• Mechanization in field crops</li> <li>• Use of suitable machineries for mechanized operations in orchard crops</li> <li>• Farm machineries for small and marginal farmers</li> <li>• Standard operating practices of dangerous farm machineries to avoid injuries</li> <li>• Operation and maintenance of tractors and other agricultural machinery for enhancing useful life</li> <li>• Management of natural resources through resource conserving machinery</li> <li>• Renewable energy applications in agriculture</li> <li>• Soil and water conservation practices in problematic fields</li> </ul>	SMS (Ag. Engg.)
	Animal Husbandry	<ul style="list-style-type: none"> <li>• Scientific Dairy Management technologies</li> </ul>	Programme Assistant (Animal Husbandry)
	Fisheries	<ul style="list-style-type: none"> <li>• Fish rearing in Tanks</li> </ul>	Programme Assistant (Animal Husbandry)
	Others, pl. specify	<ul style="list-style-type: none"> <li>• Nutrition &amp; importance of Nutri-Garden</li> </ul>	SMS (Home Science)

	Category	Technological capsules / Number	Names of the team members involved
13.3.2	Literature/publication	<b><u>Leaflets</u></b>	
		<ul style="list-style-type: none"> <li>• Scientific Dairy Management</li> </ul>	Programme Assistant (Animal Husbandry)
		<ul style="list-style-type: none"> <li>• Soil &amp; water conservation measures for dry land agriculture</li> </ul>	SMS (Soil Science) & SMS (Agronomy)
		<ul style="list-style-type: none"> <li>• Value added products of millets</li> </ul>	SMS (Home Science)
		<p><b><u>Leaflets</u></b></p> <ul style="list-style-type: none"> <li>• Dryland agriculture practices for higher productivity</li> <li>• Production technologies in different crops</li> <li>✓Maize</li> <li>✓Greengram</li> <li>✓Blackgram</li> <li>✓Cotton</li> <li>✓Groundnut</li> <li>✓Bengalgram</li> <li>✓Safflower</li> <li>✓Rabi Sorghum</li> <li>✓Sunflower</li> <li>✓Wheat</li> </ul> <p><b><u>Krishi Vigyan Patrike</u></b></p> <ul style="list-style-type: none"> <li>• Improved Crop Management practices in different crops</li> <li>✓Maize</li> <li>✓Greengram</li> <li>✓Blackgram</li> <li>✓Cotton</li> <li>✓Groundnut</li> <li>✓Bengalgram</li> <li>✓Safflower</li> <li>✓Rabi Sorghum</li> <li>✓Sunflower</li> <li>✓Wheat</li> </ul>	SMS (Agronomy)

	Category	Technological capsules / Number	Names of the team members involved
		<p><b><u>Leaflets</u></b></p> <ul style="list-style-type: none"> <li>• Modern farm equipment for higher productivity</li> <li>• Energy efficient farm machineries for efficient field operations</li> <li>• Drudgery reducing small farm equipment for farm women</li> <li>• Resource conserving technologies for enhanced profitability</li> <li>• Use of renewable energy sources in agricultural operations</li> <li>• Importance of micro irrigation systems in varied cropping systems</li> <li>• Technologies for <i>in-situ</i> conservation of rain water</li> </ul>	SMS (Ag. Engg.)
		<p><b><u>Krishi Vigyan Patrike</u></b></p> <ul style="list-style-type: none"> <li>• Importance &amp; methods of soil and water testing</li> <li>• Soil &amp; water conservation measures</li> <li>• Alternate land use systems</li> <li>• Role of nutrients for higher production</li> </ul>	SMS (Soil Science)
		<ul style="list-style-type: none"> <li>• Production technologies in Onion</li> <li>• Tips on cultivation of onion &amp; chilli</li> <li>• Weed management in onion</li> <li>• Onion seed production technology</li> <li>• Mango orchard management</li> <li>• Nutrient management in Mango</li> <li>• Post harvest management in Mango</li> </ul>	SMS (Horticulture)
		<ul style="list-style-type: none"> <li>• Spiral separator</li> <li>• Importance of value addition in millets</li> <li>• Drudgery reducing equipments</li> <li>• Solar dryer</li> </ul>	SMS (Home Science)
		<ul style="list-style-type: none"> <li>• Compartment bunding for moisture conservation</li> <li>• Production technology of Maize</li> <li>• Paired row method of sowing in Groundnut</li> <li>• Integrated nutrient management in Groundnut</li> <li>• Wider row method of sowing in Sunflower</li> <li>• Foliar spray of boron for seed setting in Sunflower</li> <li>• Detopping and its importance in Bengalgram</li> <li>• Paired row method of sowing in Rabi Sorghum</li> <li>• CaCl<sub>2</sub> seed priming &amp; its importance in Rabi Sorghum</li> </ul>	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)
		• Natural farming	SMS (Agronomy)& SMS (Soil Science)
		• Millets 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 2023-24

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	20 Ha	1.80	SMS (Agronomy)
		CFLDs in Bengalgram	20 Ha	1.80	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
<ul style="list-style-type: none"> <li>Lack of awareness about nutrition &amp; nutri garden</li> <li>Less consumption of vegetables due to high price of vegetables and fruits</li> <li>Lack of awareness on super foods</li> </ul>	<ul style="list-style-type: none"> <li>Production of vegetables</li> <li>Planting of perennial nutritious plants</li> <li>Introduction of super foods like Chia and grain amaranth</li> </ul>

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	<ul style="list-style-type: none"> <li>Quantity of vegetables produced (Kg)</li> <li>Economics</li> <li>Percent adequacy of vegetables</li> </ul>
Vegetable seeds (Brinjal, Okra, Beans, Cucumber, Tomato, Chilli, Beetroot, Carrot, Ivy gourd etc.)	200 gms	250			
Leafy vegetables (Amaranthus, Palak, Dil, Coriander, Methi, Rajagiri etc.)	100 gms	250			
Bio-fertilisers	1 Kg	100			
	<b>Total</b>	<b>1000</b>			



## Entrepreneurship Development Programme

### EDP on popularization and branding of millet products / chilli products

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

Problems	Technology to be demonstrated
<ul style="list-style-type: none"> <li>Lack of awareness on marketing and value addition of millet products / chilli products</li> </ul>	<ul style="list-style-type: none"> <li>Demonstration of millet value added products – Millet Roti, Sandige &amp; Papad</li> <li>Demonstration of value added products of chilli – Masala Chilli, Chilli powder &amp; Methi Chillies</li> <li>Packing, labelling and food licensing</li> </ul>

Critical inputs	Qty / Demo	Cost / Demo	Total cost (Rs.)	Parameters
Sealing machine	2	6000	30000	<ul style="list-style-type: none"> <li>Quantity of millet / chilli products produced (Kg)</li> <li>Economics</li> </ul>
Food licensing	2	1000		
Food labels and packaging materials	2000	23000		
<b>Total</b>		<b>30000</b>		

#### 14. CFLD (CLUSTER FRONT LINE DEMONSTRATIONS)

##### i) Pulses :

Sl. No.	Name of the crop	No. of demonstrations	Area (ha)
<u>Kharif 2022-23</u>			
1	Greengram	125	50
<u>Rabi 2022-23</u>			
2	Bengalgram	125	50
	<b>Total</b>	<b>250</b>	<b>100</b>

##### ii) Oilseeds :

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

#### 15. Revolving fund

##### 15.1 Financial status of revolving fund

Opening balance as on 01.04.2022 (Rs.in Lakh)	Expenditure incurred during 2022-23 (Rs.in Lakh)	Receipts during 2022-23 (Rs.in Lakh)	Closing balance as on 31.03.2023 (Rs.in Lakh)
6.39	30.02	30.64	7.01

### 15.2 Plan of activities under revolving fund during 2023-24

Sl.No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
1	Production of pickles and amla products	2Qtls	50000	SMS (Home Science) & Farm Manager
2	Onion seed production	5Qtls	250000	SMS (Horticulture) & Farm Manager
3	Greengram	15Qtls	90000	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	45000	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	3500 liters	122500	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 2023-24

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	60	-
16.5	Others, pl. specify		

### 17. E-linkage during 2023-24

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	Millets (February 2024)	
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 (4programmes, 120 participants)	-
2	Training to extension functionaries on rain water harvesting (1 programme, 25 participants)	-
3	Facilitation for rain water harvesting through borewell and openwellsfor ground water recharging (3 Nos.)	-

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

Thematic area	Title of the FFS	Budget proposed in Rs.
-	-	-

### 20. Integrated Farming System(IFS) planned: NIL

Description of model(s)	No. of models/units	Budget proposed in Rs.
-	-	-

## 21.Details of budget utilization (2022-23)

					(Rs.)
S.No.	Particulars	Sanctioned	Released	Expenditure	
<b>A. Recurring Contingencies</b>					
1	<b>Pay &amp; Allowances</b>	20573000	20573000	20572955	
2	<b>Traveling allowances</b>	195000	195000	195000	
3	Contingencies				
<b>A</b>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	395000	395000	395000	
<b>B</b>	POL, repair of vehicles, tractor and equipments	475000	475000	475000	
<b>C</b>	Meals/refreshment for trainees (Ceiling upto Rs.40/day/trainee be maintained)	142000	142000	142000	
<b>D</b>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	30000	30000	30000	
<b>E</b>	Frontline demonstration except oilseeds and pulses (Minimum of 30 demonstration in a year)	455000	455000	455000	
<b>F</b>	On Farm Testing (On need based, location specific and newly generated information in the major production systems of the area)	145000	145000	145000	
<b>G</b>	Training of Extension Functionaries	25000	25000	25000	
<b>H</b>	Extension activities	125000	125000	125000	
<b>I</b>	Farmers' Field School	30000	30000	30000	
<b>J</b>	EDP / Innovative activities	30000	30000	30000	
<b>K</b>	Maintenance of buildings	150000	150000	150000	
<b>L</b>	Establishment of Soil, Plant & Water Testing Laboratory and issue of Soil Health Cards	50000	50000	50000	
<b>M</b>	Nutri Garden	25000	25000	25000	
<b>N</b>	Library Maintenance	25000	25000	25000	
<b>TOTAL (A)</b>		<b>22870000</b>	<b>22870000</b>	<b>22869955</b>	
<b>B. Non-Recurring Contingencies</b>					
1	<b>Equipments including Furniture (IT)</b>	300000	300000	300000	
2	<b>Vehicle</b> (Four wheeler)	900000	900000	900000	
3	<b>SCSP Prgoramme</b>	270000	270000	270000	
<b>TOTAL (B)</b>		<b>1470000</b>	<b>1470000</b>	<b>1470000</b>	
<b>C. REVOLVING FUND</b>					
		0	0	0	
<b>GRAND TOTAL (A+B+C)</b>		<b>24340000</b>	<b>24340000</b>	<b>24339955</b>	

## 22.Details of Budget Estimate based on proposed action plan(2023-24)

Sl.No.	Particulars	BE 2023-24 proposed (Rs.)
<b>22.1</b>	<b>(A). REVENUE (Recurring Contingencies)</b>	
21.1.1	<b>Pay &amp; Allowances</b>	22375000
22.1.2	<b>Traveling allowances</b>	250000
22.1.3	<b>Contingencies</b>	
22.1.3.a	<i>Stationery, telephone, postage and other expenditure on office running, publication of Newsletter</i>	500000
22.1.3.b	<i>POL, repair of vehicles, tractor and equipments</i>	450000
22.1.3.c	<i>Food/refreshment for farmers / extension personnel @ Rs.150/person/day</i>	150000
22.1.3.d	<i>Training material (need based materials and equipments for conducting the training)</i>	100000
22.1.3.e	<i>Frontline demonstrations</i>	403210
22.1.3.f	<i>On farm testing (OFTs)/Technology Assessment</i>	100250
22.1.3.g	<i>Integrated Farming System (IFS) (Min. 5 Units)</i>	0
22.1.3.h	<i>Training of extension functionaries</i>	100000
22.1.3.i	<i>Extension activities/services</i>	150000
22.1.3.j	<i>Farmers' Field School</i>	0
22.1.3.k	<i>EDP (2 Nos.) / innovative activities</i>	30000
22.1.3.l	<i>Soil &amp; water testing &amp; issue of soil health cards</i>	200000
22.1.3.m	<i>Maintenance of building</i>	250000
22.1.3.n	<i>Library (Purchase of Journals, Periodicals, News Papers &amp; Magazines)</i>	25000
22.1.3.o	<i>Nutri Garden</i>	25000
	<b>Total Recurring (A)</b>	<b>25108460</b>
<b>22.2</b>	<b>(B). CAPITAL (Non-Recurring Contingencies)</b>	
22.2.1	<b>Equipments &amp; Furniture</b>	1000000
22.2.2	<b>Works</b> (Hostel building repair works)	1500000
22.2.3	<b>Vehicle (Tractor and Two Wheeler)</b>	1100000
22.2.4	<b>Library</b>	100000
	<b>Total Non Recurring (B)</b>	<b>3700000</b>
	<b>Grand Total (A + B)</b>	<b>2,88,08,460</b>

--:O:--