ICAR-K.H.PATIL KRISHI VIGYAN KENDRA, HULKOTI, GADAG DISTRICT ACTION PLAN FOR 2021-22

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: kvk.gadag@icar.gov.in, kvkhulkoti@gmail.com Website: www.khpkvk.org
1.2	Name and address of host organization	:	Agricultural Science Foundation Hulkoti – 582205 District: Gadag, State: Karnataka Phone: (08372) 289069 E-mail: hulkotiasf@gmail.com asf_hulkoti@yahoo.co.in Website: www.asf.ind.in
1.3	Year of sanction	:	1985
1.4	Website address of KVK and date of last update		www.khpkvk.org and date of last update is 28-07-2021

2. Details of staff as on date

		If perman		If permanent, ple	permanent, please indicate		If temporary, pl.
SI. No.	Sanctioned post	Name of the incumbent	Discipline	Current pay band	Current grade pay	Date of joining	indicate the consolidated amount paid (Rs./month)
2.1	Senior Scientist & Head/PC	Dr. L.G. Hiregoudar	Crop Physiology	37400-67000	10000	05.09.1992	Р
2.2	Subject Matter Specialist	Mr. S.H.Adapur	Ag. Extension	15600-39100	7600	22.11.1990	Р
2.3	Subject Matter Specialist	Dr. S.V.Mankani	Home Science	15600-39100	7600	20.07.1993	Р
2.4	Subject Matter Specialist	Mr. V.D.Vaikunthe	Agronomy	15600-39100	7600	23.07.1985	Р
2.5	Subject Matter Specialist	Mr. N.H.Bhandi	Soil Science	15600-39100	6000	01.06.2005	Р
2.6	Subject Matter Specialist	Ms. Hemavati R.H.	Horticulture	15600-39100	5400	14.02.2020	Р

				If permanent, ple	ease indicate		If temporary, pl.
SI. No.	Sanctioned post	Name of the incumbent	Discipline	Current pay band	Current grade pay	Date of joining	indicate the consolidated amount paid (Rs./month)
2.7	Subject Matter Specialist	VACANT	Agri. Engineering	-	-	-	-
2.8	Programme Assistant (Animal Science)	Dr. B.M.Murgod	Animal Husbandry	9300-34800	4600	25.06.2007	Р
2.9	Programme Assistant (Computer Programmer)	Smt. L.S.Asuti	Computers	9300-34800	4600	01.06.2005	Р
2.10	Programme Assistant (Farm Manager)	Mr. S. L. Halemani	Farms	9300-34800	4200	01.02.2011	Р
2.11	Accountant/Superintendent	Mr. M.B. Jakkanagoudra	-	9300-34800	4600	25.06.2007	Р
2.12	Stenographer	Mr. T.K. Sai Swaroop Rao	-	5200-20200	2400	15.12.2016	Р
2.13	Driver 1	Mr. N.L. Hadapad	-	5200-20200	2400	03.09.1992	Р
2.14	Driver 2	Mr. G.D. Madivalar	-	5200-20200	2400	20.07.1995	Р
2.15	Skilled Support Staff-1	Mr. V.R. Navalli	-	5200-20200	2400	20.07.1993	Р
2.16	Skilled Support Staff -2	Mrs. S. V. Karadani	-	5200-20200	2400	14.02.2020	Р

3. Details of SAC meeting conducted during 2020-21

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
10-03-2021	, a. a. e. panso	Make trial of Ajawan crop once again. Take-up repeated sowing if germination does not come properly.	Shall be taken up once again during Rabi season 2021-22 as germination was not obtained during Rabi season of previous year	
		Plant Mehandi and Soapnut as hedge trees and Muttala leaf tree as these plants will give raw material for preparation of various products and this will give employment opportunity to SHGs.	Planting will be taken-up at KVK farm as demonstration	
Grow Wood Apple in KVK demonstration plot as it is one of the good medicinal plant.		Planting will be taken-up at KVK farm as demonstration		
		Prepare contingency plan for excess / scanty rainfall for Gadag district if situation arises. Then provide this plan information to all villages through e-mails of Gram Panchayats in the district and through farmers' various Whatsapp groups.	It shall be taken-up during the year 2021-22	

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
		Provide information of UAS Scientists working in Agro-forestry at Sirsi and Dharwad to Gadag district farmers interested to know about growing forestry species.		
		Arrange trainings on agriculture marketing to the farmers especially with respect to cleaning, grading and bulk marketing.	These trainings will be arranged during the year 2021-22	
		Provide information to farmers about Nano Urea, liquid NPK nutrients, liquid bio-fertilisers etc. during farmers' training programmes.		
		Take-up trials of new varieties like DBG-3 and DBG-4 in Groundnut, DBVG-4, NBEG-47 & NBEG-49 in Bengalgram, DGGV-7 in Greengram and CSR-29R in Rabi Sorghum.	Already planned OFTs and FLDs using these new varieties during the year 2021-22	

Tentative date of SAC meeting proposed during 2021-22 : November, 2021

4. Details of operational areas proposed during 2021-22

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 Shirol (Gadag block)	Maize	 Low income due to mono cropping Imbalanced nutrition Incidence of army worm Incidence of Turcicum leaf blight Drudgery during threshing and winnowing of Maize 	35 ha.(40%)	 FLD on Maize + Redgram (4:2) intercropping system Training on ICM in Maize+Redgram intercropping system Training on IPM in Maize Supply of literature FLD on functional clothing kit Field day Training on drudgery reduction
	Vegetable crops	Low income due to cultivation of local varieties	36 ha. (60% of the irrigated area)	FLD on Vegetable Cafeteria (Ridgegourd, Dolichos bean, French Bean, Coriander and Amaranthus)

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.)*
				Trainings on ICM in vegetable cropsSupply of literatureField days
	Okra	Low productivity due to cultivation of low yielding Okra private hybrids	32 ha. (45% of the irrigated area)	 OFT on Assessment of high yielding Okra hybrids for higher productivity Training on ICM in Okra crop Supply of literature
	Green chilli	 Low income due to application of imbalanced nutrition Incidence of sucking pest and pod borer Incidence of Murda complex disease 		 FLD on ICM in Green Chilli Training on ICM in flower crops Supply of literature Field day
	Flower crops	 Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) Low yield is also due to incidence of bud borer pest and leaf spot diseases 	24 ha. (40% of the irrigated area)	 FLD on ICM in Chrysanthemum Training on ICM in flower crops Supply of literature Field day
	Dryland horticulture	 Less profit from existing cropping pattern due to vagaries of mansoon and lack of crop diversification 	All area	Training on tree based farming systemSupply of literature
	Borewell	Decreased ground water level and less water availability for irrigation	30 ha.	 Training on recharge of ground water through borewell Field visits to demonstration units of artificial recharge of ground water through borewell 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.	50 Nos.	 FLD on fodder cafeteria Training on scientific management of milch cattle Supply of literature Field visit Mobile advisory services Field day Animal health camps in collaboration with Department of Animal Husbandry
	Nutrition and health	Less consumption of fruits and vegetables	85% families	 Training on balanced diet and nutrition Training on healthy foods for healthy life Training on importance of millets in diet
	PHT in Chilli	 Unhygienic way of drying of Red Chillies 	80 % families	FLD on solar drying of Red ChilliesTraining on use of solar dryer for drying of chillies
	Organic input production	Lack of awareness on importance of organic inputs among farm women	70% families	Training Supply of literature
Cluster B Shingatarayankeri (Mundaragi block)	Bt. Cotton	 Incidence of sucking pest & mirid bug Incidence of leaf spot & leaf reddening 	150 ha. (40%)	Training on IPM in Bt. CottonSupply of literature
	Maize	 Low income due to mono cropping Imabalanced nutrition Incidence of army worm Incidence of Turcicum leaf blight Drudgery during threshing and winnowing of Maize 	80 ha.(25%)	 FLD on Maize + Redgram (4:2) intercropping system Training on ICM in Maize+Redgram intercropping system Training on IPM in Maize Supply of literature FLD on Functional Clothing Kit Field day
	Rabi Sorghum	Low productivity in local variety	20 ha.	FLD on ICM in Rabi SorghumTrainingExtension activities

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.)*
	Spreading Groundnut	• Low yield is due to incidence of leaf minor and leaf spot	30 ha. (10%)	Training on ICM in Spreading GroundnutExtension activities
	Summer Groundnut	Incidence of leaf minor and leaf spot reduce the yields	10 ha.(16%)	 FLD on ICM in summer groundnut (NMOOP) Training on pest and disease management Supply of literature Field day
	Greengram	Low yield due to incidence of powdery mildew	30 ha. (10%)	 Training on ICM in Greengram Supply of literature Field day FLD on ICM in Greengram (NFSM)
	Vegetable crops	Low income due to cultivation of low yielding local varieties	90 ha. (76% of the irrigated area)	 FLD on Vegetable Cafeteria (Ridgegourd, Dolichos bean, French Bean, Coriander and Amaranthus) Trainings on ICM in vegetable crops Supply of literature Field days
	Okra	Low productivity due to cultivation of low yielding Okra private hybrids	50 ha. (40% of the irrigated area)	 OFT on Assessment of high yielding Okra hybrids for higher productivity Training on ICM in Okra crop Supply of literature
	Flower crops	 Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) Low yield is also due to incidence of bud borer pest and leaf spot diseases 	50 ha. (39%)	 FLD on ICM in Chrysanthemum Trainings on commercial flower crops Supply of literature Field day
	Borewell	Decreased ground water level and less water availability for irrigation	120 ha. (37%)	 Training on recharge of ground water through borewell Field visits to demonstration units of artificial recharge of ground water through borewell 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.	10 Nos.	 FLD on fodder and azolla production & silage making Training on scientific management of milch cattle Supply of literature Field visit Mobile advisory services Field days Animal health camp with Department of Animal Husbandry
	Sheep	Low body weight in lambs	500 Nos.	 FLD on upgradation of local sheep with Nari Suvarna Ram Training on scientific management of sheep
	Goat	Low body weight in kids	50 Nos.	 FLD on upgradation of local goats with Jamunapari buck Training on scientific management of goats
	Nutrition and health	Less consumption of fruits and vegetables	85% families	 Training on balanced diet and nutrition Training on healthy foods for healthy life Training on importance of millets in diet
	Value addition	Lack of value addition in milk	50% families	Training on importance of milk and value added products
	Drudgery	Drudgery in weeding & intercultivation and cleaning & grading of grains	80% families	Demonstration on cycle weeder & spiral separator
	Organic input production	Lack of awareness on importance of organic inputs among farm women	70% families	TrainingSupply of literatureField day
Cluster C Chikkasavanur (Shirahatti block)	Bt. Cotton	 Incidence of sucking pest & mirid bug Incidence of leaf spot & leaf reddening 	125 ha. (40%)	 Training on IPM in Bt. Cotton Supply of literature 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.)*
	Maize	 Low income due to mono cropping Imabalanced nutrition Incidence of army worm Incidence of Turcicum leaf blight Drudgery during threshing and winnowing of Maize 	110 ha. (50%)	 FLD on Maize + Redgram (4:2) intercropping system Training on ICM in Maize+Redgram intercropping system Training on IPM in Maize Supply of literature FLD on Functional clothing kit Field day
	Rabi Sorghum	Low productivity in local variety	25 ha.	 FLD on ICM in Rabi Sorghum Training Extension activities
	Spreading Groundnut	Low yield due to incidence of leaf minor and leaf spot	20 ha. (16%)	Training on ICM in Spreading GroundnutExtension activities
	Summer Groundnut	Incidence of leaf minor and leaf spot reduce the yields	10 ha.(16%)	 FLD on ICM in summer groundnut (NMOOP) Training on pest and disease management Supply of literature Field day
	Bunch Groundnut	Moisture stress and long dry spell	10 ha.(18%)	 OFT on drought tolerant TG-37A and DGRMB-24 varieties in bunch groundnut Training on ICM practices Supply of literature Field day
	Greengram	Low yield due to use of old variety and incidence of powdery mildew	20 ha. (16%)	 FLD on ICM in Greengram (variety : DGGV-2) Training on ICM in Greengram Supply of literature Field day
	Vegetable crops	Low income due to cultivation of low yielding local varieties	32 ha. (53% of the irrigated area)	 FLD on Vegetable Cafeteria (Ridgegourd, Dolichos bean, French Bean, Coriander and Amaranthus) Training on ICM in vegetable crops Supply of literature Field days

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.)*
	Okra	Low productivity due to cultivation of low yielding Okra private hybrids	20 ha. (25% of the irrigated area)	 OFT on Assessment of high yielding Okra hybrids for higher productivity Training on ICM in Okra crop Supply of literature
	White Onion	 Low productivity due to cultivation of low yielding local variety 	15 ha. (23% of the irrigated area)	 OFT on assessment of White Onion varieties Training on production technology in white onion Field Day
	Perennial fruit crops	 Less profit from existing cropping pattern and lack of crop diversification 	All area	Training on tree based farming systemSupply of literature
	Borewell	Decreased ground water level and less water availability for irrigation	60 ha. (30%)	 Training on recharge of ground water through borewell Field visits to demonstration units of artificial recharge of ground water through borewell Supply of literature
	Milch cattle	Low productivity of milk due to non-availability of green fodder throughout the year.	40 Nos.	 FLD on fodder cafeteria Training on scientific management of milch cattle Supply of literature Field visit Mobile advisory service Field day Animal health camp 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-farms for year round nutritional security among farm families Training on balanced diet and nutrition Training on healthy foods for healthy life Training on importance of millets in diet
	Value addition	Lack of value addition in milk	50% families	Training on importance of milk and value added products

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.)*
	PHT in Chilli	Unhygienic way of drying of Red Chillies	80 % families	 OFT on Assessment of various methods of drying of Red Chillies Training on use of solar dryer for drying of chillies
	Drudgery	Drudgery in weeding, intercultivation and cleaning and grading of grains	80% families	Demonstration on cycle weeder & spiral separator
	Organic input production	Lack of awareness on importance of organic inputs among farm women	70% families	TrainingSupply of literatureField day
Cluster G Kalakeri (Naragund block)	Greengram	 Low productivity due to usage of low yielding local variety Incidence of yellow mosaic virus Incidence of powdery mildew Incidence of Spital bug and pod borer 	360 ha.	 Training on ICM in Greengram Supply of literature Field day
	Bengalgram	 Low yield due to cultivation of low yielding local variety Low yield due to incidence of wilt & rust and incidence of pod borer 	180 ha.	 OFT on assessment of DBGV-204, NBeG-47 and NBeG-49 varieties FLD on ICM in Bengalgram Training on ICM in Bengalgram Supply of literature Field day
	Safflower	Low productivity due to cultivation of local variety Incidence of sucking pest Incidence of capsule borer	35 ha	 OFT on assessment of Annigeri-2020 and ISF-764 varieties Training on ICM in Safflower Supply of literature Field day
	Red Onion	 Low productivity due to imbalanced nutrition Low productivity due to cultivation of low yielding 	120 ha.	 OFT on Sulphur nutrition in Onion crop Training on ICM in Red Onion Supply of literature 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.)*
		local varietyIncidence of thrips reduces the yields		
	Rabi Sorghum	 Low productivity due to usage of local variety Incidence of smut disease Incidence of shoot fly and stem borer 	90 ha.	 FLD on ICM in Rabi Sorghum Training on ICM in Rabi Sorghum Supply of literature Field day
	Drudgery	Drudgery in farm activities	Majority of farm women	Training on drudgery reducing equipments in farm activities
	Nutrition and health	Less consumption of millets, fruits and vegetables in daily diet	85% families	Training on health and nutrition, importance of millets in diet

5. Technology assessment during 2021-22

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	Productivity of JAKI- 9218	Assessment of potential productivity	Farmers' Practice Cultivation of JAKI-9218 variety	-	-	-	-			Height of the plantDuration of the	SMS (Agronomy)
		variety is low under irrigated condition	of DBGV- 204, NBeG- 47 & NBeG- 49 varieties	Technology Option- 1 Cultivation of JAKI-9218 variety	UAS, Dharwad	Seeds (JAKI-9218)	20 Kg	1660			crop No. of pods/plant Seed weight (100 No)	
				Technology Option-2 Assessment of DBGV-204 variety	UAS, Dharwad	Seeds (DBGV-204)	20 Kg	1660			Incidence of wilt Grain yield	
				Technology Option-3 Assessment of NBeG-47 variety	PJTSAU and ICRISAT,	Seeds (NBeG-47)	20 Kg	1660				
				<u>Technology</u> <u>Option-3</u>	Hyderabad	Seeds (NBeG-49)	20 Kg	1660	5	38025		
				Assessment of		Other inputs						
				NBeG-49 variety		Rhizobium	100 ml	40				
						PSB	100 ml	40				
						Trichoderma	100 gm	25				
						Tebuconazole	100	400				
						25 Ec	ml					
						Tebuconazole 50% + Trifloxistrabin 25%	50 gm	460				
							Total	7605				

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
5.2	Bunch Groundnut	Low productivity due to	Assessment of TG-37 A & DGRMB-	Farmers' Practice Cultivation of TMV-2 variety								
		moisture stress caused by long dry	24 (drought tolerant varieties)	Technology Option- 1 Cultivation of GPBD-4 variety	UAS, Dharwad	Pods (GPBD-4)	40 Kg	3000	3 (Each		Pod yield (Qtl/ha)	
		spells		Technology Option-2 Assessment of TG-37 A variety	Directorate of Groundnut Research, Junagad,	Pods (TG-37 A)	40 Kg	3000	trial 0.2 ha.)	27000	Number of pods/plant Duration (Days)	SMS (Agronomy)
				Technology Option-3 Assessment of DGRMB-24 variety	Gujarat	Pods (DGRMB-24)	40 Kg	3000				
				j		1	Total	9000				
5.3	Safflower	Low productivity due to cultivation of local	Assessment of ISF-764 and A-2020 varieties for higher	Farmers' Practice Cultivation of A-1 variety (impure) Technology Option-	UAS, Dharwad	Seeds (A-1)	3.5 Kg	350			Yield (Qtl/ha)Duration (Days)No. of capsules per plant	SMS (Ag. Extension)
		variety	productivity	Cultivation of A-1 variety (pure seeds)			rvg					
			_	Technology Option-2 Assessment of ISF-764 variety	ICAR-IIOR, Hyderabad	Seeds (ISF-764)	3.5 Kg	350	6	21780		
				<u>Technology</u>	UAS, Dharwad	Seeds	3.5	350				
				Option-3 Assessment of		(A-2020)	Kg					
				A-2020 variety		Other inputs Thiamethaxam	50	200				
			A	Lozo vanoty		30 FS (seed treatment)	ml					
						Thiamethaxam	100	900				
						25 WG (Foliar spray)	gm					

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
						Emamectin	200	680				
						Benzoate	gm					
						Sulphur	100	500				
							Kg					
						Zinc Sulphate	5 Kg	300				
							Total	3630				
5.4	White Onion	Low yield in Telagi White Onion variety	Assessment of White Onion varieties for higher	Farmers' Practice Cultivation of Telagi White Technology Option 1	ICAR-DOGR, Pune	Seeds (Bhima	2 Kg	5000	5	50000	 Yield (Qtl/ha) Bulb weight (gms) Resistance to pest and disease (%) 	SMS (Horticulture)
			productivity	Bhima Shubra		Shubra)			-		(70)	
				Technology Option 2 Bhima Shweta	ICAR-DOGR, Pune	Seeds (Bhima Shweta)	2 Kg	5000				
						,	Total	10000				
5.5	Okra	Existing hybrids are low yielding	Assessment of high yielding okra	Farmers' Practice Cultivation of private hybrids							Yield (Qtl/ha) and economics PDI (%)	SMS (Horticulture)
		and resulting in	hybrids for higher	Technology Option 1	TNAU, Tamilnadu	Seeds CoBH-4	1 Kg	2500			Plant height & Duration of the	
		low income	productivity	CoBH-4		Arka Vegetable Special	1Kg	200	3	16200	crop	
				Technology Option 1 Arka Nikita	ICAR-IIHR, Bengaluru	Seeds Arka Nikita	1 Kg	2500				
						Arka Vegetable Special	1Kg	200				
							Total	5400				

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
5.6	Red Onion	Poor bulb quality and low productivity	Assessment of Sulphur nutrition in Onion	Farmers' Practice Application of 80:57.5:0 NPK Kg/ha		Seeds (Bheema Super/ Arka Kalyan)	2 Kg	5000			Bulb Yield (Qtl./ha) Duration (days)	SMS (Soil Science)
		due to imbalanced nutrition		Technology Option 1 Application of 125:75:125 NPK Kg/ha (RDF)	UAS, Dharwad & UHS, Bagalkot	Seeds (Bheema Super/ Arka Kalyan)	2 Kg	5000			Incidence of pest and disease (%) Percentage of bulb rot	
						Seeds (Bheema Super/ Arka Kalyan)	2 Kg	5000	3	46992	Keeping quality Rate per quintal	
				Technology Option		Azospirillum	2 Kg	200			94	
				<u>2</u>		PSB	2 Kg	200				
				RDF + 20 Kg Sulphur / ha and	ICAR-DOGR,	Gypsum	66	264				
				Azospirillum and	Pune	Total	Kg	45004				
				PSB @ 5 Kg		Total TOTAL		15664 37000				
				each/ha		TOTAL		37000				
							Total o	of OFTs		199997		

6. Frontline demonstrations during 2021-22

SI. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrat ed	Name of variety	Nam e of hybr id	Source of technology	Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members
6.1	Cereals	Maize+ Redgram	Pod Fly & Pod Borer in Redgram crop	Demonstrat ion of Maize+ Redgram (4:2) intercroppin g system	Redgram : TS-3R	Maize: :CP- 848	UAS, Dharwad	Seeds (TS-3R) CaCl ₂ @ 2% Rhizobium PSB Trichoderma Yellow sticky traps Pulse magic	3 Kg 100 gm 200 gm 200 gm 50 gm 8 nos.	300 20 25 25 10 468			Yield (Qtl/ha)Seed weightCEY	SMS (Soil Science)
			Incidence of fall army worm in Maize Low market price for Redgram due to un-graded grains Drudgery during threshing of Maize and cleaning of Redgram to farm women Low price for ungraded grains					Functional clothing kit	Total 10 sets	3000	50	71150 3000		
								Total				74150		

SI. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrat ed	Name of variety	Nam e of hybr id	Source of technology	Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members
	Cereals	Rabi Sorghum	Low productivity	Demonstrat ion of SPV-	SPV-2217	-	UAS, Dharwad	Seeds (SPV-2217)	3 Kg	150			Yield (Qtl/ha)% of lodging	SMS (Agronomy) &
			in existing	2217				CaCl ₂	100 gm	20			 Organoleptic 	SMS (Home
			M 35-1 variety	variety in Rabi				Azospirillum	20 ml	5	25	4625	evaluation	Science)
			 Moisture 	Sorghum				PSB	20 ml	5				
			stress	crop				Trichoderma	15 gm	5	•			
								Total		185				
6.2	Millets													
6.3	Oilseeds Pulses	Greengram	• Low yield due to	Demonstrat ion of	DGGV-2	-	UAS, Dharwad	Seeds (DGGV-2)	5 Kg	500			Yield (Qtl/ha)No. of pods /	SMS (Agronomy)
			usage of	DGGV-2				PSB	200 gm	20			plant	
			local variety Incidence of	variety in Greengram				Rhizobium	200 gm	20	-		•Incidence of	
			Yellow	crop				Pulse Magic	2 Kg	550	25	27250	rust (%)	
			Mosaic virus Incidence of					Total		1090	20	2.200		
			pod borer • Incidence of Powdery Mildew											
6.5	Commerci al crops													
6.6	Horticultur	Chrysant	Low quality	Integrated	Raja /	-	ICAR-	Neem Cake	40 Kg.	1000	20		• Yield	SMS
	al crops	hemum	and low	Crop	Kurnool		IIHR,	Borax	1Kg	100	(Each		(Qtl/ha)	(Horticulture)
			yields due	Managemen t in			Bengaluru	ZnSO4	1Kg	50	demo is of 0.2		Quality	
			to imbalanced	Chrysanthe				MgSO4 Yellow sticky	2Kg 5	100 300	ha.)		parameters	
			nutrients	mum crop				traps	5	300		31000		
			(loose	•				Total		1550				
			flower buds						+		1			
			and improper											
			opening of											

SI. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrat ed	Name of variety	Nam e of hybr id	Source of technology	Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members
			flower buds and low shelf life) • Low yield due to incidence of bud borer pest and leaf spot disease											
		Green Chilli	• Low	Integrated Crop	Nagavi Gidda	-	UHS, Bagalkot &	Trichoderma viride	1 Kg	300			• Yield	SMS (Horticulture)
		Chilli	productivity due to	Manageme	kaayi		IIHR,	Neem cake	1 Qtl	2400			(Qtl/ha) • Incidence	(Horticulture)
			imbalanced	nt in Green	Radyi		Bengaluru	Arka Microbial		200			of pest	
			nutrient	Chilli				Consortium	3				(Nos.) and	
			applicationHigh incidence of					Arka vegetable special	1 Kg	200			disease (%)	
			thrips, mites (Murda Complex) and fruit					Yellow sticky traps	6No.	380	16	55680		
			borer • Incidence of powdery mildew, leaf spot and Anthracnose					Total		3480				
		Red Chilli	Moisture	IPDM in	Byadagi	_	IIHR,	Trichoderma	2.5kg	750			• Yield	SMS
			stress	Byadagi	dabbi and		Bengaluru	viride					(Qtl/ha)	(Horticulture)
			during	Chilli	Byadagi		and UAS,	Yellow / Blue	16	960			• Disease	,
			critical		kaddi		Dharwad	sticky traps	500 ml	050	15 4920	49200	index (%)	
			stage of crop growth					Neembicidine 3000 ppm	500 ml	250			• Pest	
			• Non-					Arka microbial	0.5 Kg	120			incidence	
			availability					consortium	0.0 1.9	.20				

SI. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrat ed	Name of variety	Nam e of hybr id	Source of technology	Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members
			of quality					Neem cake	50 Kg	1200				
			and pure						Total	3280				
			seeds of						1 0 10.1	3233				
			Byadagi dabbi and											
			Byadagi											
			kaddi											
			• High											
			incidence of											
			sucking											
			pests											
			leading to											
			murda											
			complex disease											
			• High											
			incidence of											
			anthracnose											
			disease											
			Lack of											
			proper											
			knowledge											
			on ICM practices											
			resulting in											
			poor											
			productivity											
			and quality											
			 Improper 											
			post-harvest											
			manageme											
			nt leading to											
			high content of aflatoxin											
			in pod											

SI. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrat ed	Name of variety	Nam e of hybr id	Source of technology	Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members
	Horticultur al crops	Vegetable Crop Cafeteria	Low productivity and income due to non-availability of improved vegetable varieties and less profit as farmers grow any of the vegetable crop	Introduction of new varieties in vegetable crops of ICAR-IIHR, Bengaluru	Ridgegou rd- Arka Prasana French bean- Arka Arjun Dolichos Bean – Arka Amogh Amaranth us – Arka Samraksh a Coriander – Arka		IIHR, Bengaluru	Seeds of Ridgegourd French bean Dolichos Bean Amaranthus Coriander	400 gm 4 Kg 4 Kg 130 gm 500 gm	900 1500 1500 100 300 4300	10	43000	• Yield (Qtl/ha) • Income (Rs./ha)	SMS (Horticulture)
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	Isha Hybrid Napier- DHN 6, Multicut Jowar- VH-988, Guinea grass, Rhodes grass, Signal grass: Lucerne, Stylosanth es Hamata 555 & Stylo Scabra		ICAR- IGFRI, RRS, Dharwad & UAS, Dharwad	Hybrid Napier-DHN 6 slips Multicut — COFS-31 Grazing guinea grass slips Rhodes grass slips Signal grass slips Fodder Oats	Nos. 550 Nos. 250 Nos. 8.0 Kg	800 1280 300 550 250	10	44100	Milk yield/Cow / lactation	Prog. Asst. (Animal Science)

SI. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrat ed	Name of variety	Nam e of hybr id	Source of technology	Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members
					seeds,			seeds						
					Subabul			Cow pea	0.5 Kg	60				
					K8/B-42 & Sesbania			Subabul – K8/B-42	100 gm	40				
					grandiflora & Fodder oats			Susbenia grandiflora	100 gm	50				
								Total		4410				
6.8	Fisheries													
6.9	Others	Solar drier	Unhygienic way of drying of Red chillies	Drying of Red chillies in solar drier and sunlight	-	-	M/s Raheja Solar Driers	Solar drier (40 Kg capacity) Analysis of	2	65000	3		Drying time (Hours)Quality parameter	SMS (Home Science)
								Aflatoxin content	samples			71000	s • Aflatoxin content	
												71000	Whitening of chillies (%)	
	Medicinal plants	-	-	-	-	-	-	-	-	-	-	-	-	-
										Total of	FLDs	400005		

7. Training for farmers/ farm women during 2021-22

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
7.1	Crop production	Maize+Redgram	FLD	ICM in Maize+Redgram intercropping system	3	90	SMSs (Soil Science & Agronomy)
		Millet crops	Others	ICM in Little millet	1	30	SMSs (Home Science & Agronomy)
		Greengram	FLD	ICM in Greengram	2	50	SMSs (Agronomy)
		Safflower	OFT	ICM in ISF-764 variety of Safflower	2	50	SMS (Ag. Extension & Agronomy)
		Rabi Sorghum	FLD & others	ICM in Rabi Sorghum	3	90	SMSs (Ag. Extension & Agronomy)
		Bengalgram	OFT & FLD	ICM in Bengalgram	2	55	SMSs (Agronomy)
		Summer Groundnut	Others	ICM in Summer Groundnut	1	25	SMSs (Agronomy)
		Bunch Groundnut	OFT	ICM in Bunch Groundnut	1	25	SMSs (Agronomy)
		Fodder trees	Others	Planting of fodder trees on field bunds	1	15	Programme Assistant (Animal Husbandry)
7.2	Horticulture production	Red Onion	OFT, FLD & Others	ICM in Red Onion crop	3	75	SMSs (Horticulture) & Soil Science)
		White Onion	OFT	ICM in Bhima Shubra & Bhima Sweta varieties of White Onion crop	2	50	SMSs (Horticulture)
		Chilli	Others	ICM in Chilli crop	2	50	SMSs (Horticulture & Soil Science)
		Vegetable crops	FLD	ICM in vegetable crops	4	100	SMS (Horticulture)
		Flower crops	FLD & others	ICM in Chrysanthemum crop	2	50	SMS (Horticulture)
		Fruit crops	Others	Orchard management of fruit crops	2	50	SMS (Horticulture)

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
		Dryland horticulture	Others	Promotion of dryland horticulture	2	50	SMS (Horticulture)
		Onion	Others	Usage of pre and post emergent herbicides to reduce the cost of cultivation	1	25	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 Silage preparation and its importance 	2	50	Programme Assistant (Animal Husbandry)
		Poultry birds	Others	Scientific management of poultry birds	1	30	Programme Assistant (Animal Husbandry)
7.4	Home Science	Nutrition	FLD	Importance of protective foods and Nutrition Garden	4	100	SMS (Home Science)
		Storage methods	OFT	Onion storage methods	3	50	SMS (Home Science)
		Drudgery	FLD	Drudgery reducing equipments	4	80	SMS (Home Science)
		Bio-fortified crops	Others	Importance of bio- fortified foods	4	50	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	50	SMS (Soil Science)
7.6	Soil health and fertility	Soil health & fertility	Others	Soil fertility management in dryland area	6	200	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	5	150	SMSs (Home Science & 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
				value addition			
			FLD	PHT in Chilli storage	3	50	SMS (Home Science)
			Others	PHT in millets – cleaning, grading, packing, labeling & marketing of millets & value addition	4	120	SMS (Home Science)
7.9	Capacity building/ group dynamics	Multiple Income Generating Activities	Others	Empowerment of women SHGs through multiple IGAs	3	100	SMS (Home Science)
		Capacity building	Others	Capacity building training & strengthening of SHGs	3	100	SMS (Home Science)
		Farmers' Interest Group	Others	Formation of FIG and Farmers Producer Organisation	4	120	SMS (Ag. Extension)
		Farmers' Producer Organisation	Others	Business plan development for FPOs	2	60	SMS (Ag. Extension)
		Integrated Farming System	Others	Integrated Farming System for FPO members	2	60	SMS (Ag. Extension)
7.10	Farm mechanization						
7.11	Fisheries production technologies						
7.12	Mushroom production						
7.13	Agro forestry						
7.14	Bee keeping						
7.15	Sericulture						
7.16	Others, pl. specify	Artificial recharging of groundwater through borewell	Others	Others Technology on recharging of ground water through borewell		75	SMSs (Soil Science & 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
		All field crops	Others	Usage of Organic Manure & Green Manure crops to enhance moisture holding capacity	2	50	SMSs (Soil Science & Agronomy)
				Total	91	2375	

8. Training for rural youth during 2021-22

SI. 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						
8.2	Horticulture production						
8.3	Livestock production	Dairy enterprise	-	Skill upgradation training on dairy management practices	4	100	Programme Assistant (Animal Husbandry)
		Poultry	-	Scientific management of poultry birds	1	25	Programme Assistant (Animal Husbandry)
		Sheep & Goat	-	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						
8.6	Production of inputs at site	Jeevamruta production	Other	Jeevamruta preparation & usage	1	20	SMS (Soil Science)
8.7	Soil health and fertility	Soil health and fertility	Other	Soil health enhancement in dryland area through Organic input production	1	25	SMS (Soil Science)

SI. 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	Value addition	Others	Value addition in cereals, pulses, millets, fruits & vegetables	1	20	SMS (Home Science)
8.9	Capacity building/ group dynamics	All crops	Others	Entrepreneurship development in crops and enterprise	2	60	SMS (Ag. Extension)
8.10	Farm mechanization						
8.11	Fisheries production technologies						
8.12	Mushroom production						
8.13	Agro forestry						
8.14	Bee keeping						
8.15	Sericulture					_	
8.16	Others, pl. specify						
			Total		16	390	

9. Training for extension personnel during 2021-22

SI.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 and intercropping system in pulses, oilseeds & commercial crops	1	25	SMSs (Agronomy & Soil Science)
		Production & usage of organic inputs	1	25	SMS (Soil Science)
9.2	Home Science				
	Deficiency diseases	Iron rich foods and iron deficiency diseases	8	275	CMC (Homo Coiongo)
		Nutrition Garden – It's importance and layout	0	275	SMS (Home Science)
9.3	Capacity building and group dynamics	Formation and functioning of Farmers' Producer Organisation	1	30	SMS (Ag. Extension)

SI.No.	Thematic area and the crop/ enterprise	Training title	No. of courses	Expected No. of participants	Names of the team members involved
		Design, layout and conducting front line demonstrations for ATMA staff	1	10	SMS (Ag. Extension)
9.4	Horticulture				
9.5	Livestock production and management	Nutrition and disease management	1	30	Programme Assistant (Animal Husbandry)
9.6	Plant protection				
9.7	Farm mechanization				
9.8	PHT and value addition				
9.9	Production of inputs at site				
9.10	Sericulture				
9.11	Fisheries				
9.12	Other, pl. specify				
	Soil fertility	Importance of soil testing and soil fertility management	1	25	SMS (Soil Science)
		Total	14	420	

10. Vocational trainings during 2020-21

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						
10.2	Home Science						
10.3	Capacity building and group Dynamics						
10.4	Horticulture						
10.5	Livestock production and management	Scientific management of dairy animals	2	10	60	RSETI, ASF, ZP etc	Programme Assistant (Animal Husbandry)

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
		Scientific management of sheep and goat	2	3	75	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						
10.7	Farm mechanization						
10.8	PHT and value addition						
10.9	Production of inputs at site						
10.10	Sericulture				-	_	
10.11	Fisheries				-	_	
10.12	Other, pl. specify						
		Total	5	16	165		

11. Sponsored trainings during 2021-22

SI.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	5	3	150	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						

SI.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
11.7	Farm mechanization						
11.8	PHT and value addition						
11.9	Production of inputs at site						
11.10	Sericulture						
11.11	Fisheries						
11.12	Others, pl. specify						
	Soil fertility management	Soil, water & crop management in command area	15	2	450	CADA	SMSs (Agronomy, & Soil Science)
		Total	20		600		

12. Extension activities during 2020-21

SI. 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)
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)	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

SI. No.	Extension activity	No. of activities	Targeted number of participants	Names of the team members involved
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	4	-	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	1954	27413	

13. Activities proposed as knowledge and resource centre during 2021-22

13.1 Technological knowledge

SI. No.	Category	Details of technologies	Area (ha)	Number	Names of the team members involved
13.1.1	Technology park/ crop cafeteria	Pulse crops and their inter crops	6 ha.	1000	SMS (Agronomy) & Prog. Asst.(Farms)
13.1.2	Demonstration units	Value addition in Amla, Mango & Karounda	-	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	Soil, water & plant testing	-	1000 samples	SMS (Soil Science)
	services	Identification of pest and disease	-	50 samples	SMS (Agronomy & Horticulture)

SI. No.	Category	Details of technologies	Area (ha)	Number	Names of the team members involved
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

SI. No.	Category	Name of the production partner agency, if any	Name of the product	Quantity planned to be produced during 2021-22 (q)	Number planned to be produced during 2021-22	Names of the team members involved
13.2.1	Seeds	Farmers' FPOs	Onion	5	-	SMS(Horticulture) & Farm Manager
		Farmers' FPOs	Greengram	15	-	
		Farmers' FPOs	Redgram	15		
		Farmers' FPOs	Bengalgram	30		SMS(Agronomy) & Farm
		Farmers' FPOs	Safflower	20		Manager
		Farmers' FPOs	Rabi Sorghum	10		
13.2.2	Planting material		Mango	-	500	
			Tamarind	-	600	SMS(Horticulture) &
			Cashewnut	-	2000	Farm Manager
			Guava	-	500	
			Fodder crops / fodder slips	1	45000	Programme Assistant, (Animal Science) & Farm Manager
13.2.3	Bio-products		Vermicompost	200	-	
			Vermiwash	500 lit	-	SMS(Soil Science) &
			Earthworms	2.5	-	Farm Manager
			Azolla	2.5	-	
13.2.4	Livestock strains		Calves	-	2	Programme Assistant,
			Lambs	-	8	(Animal Science) &
			Kids	-	15	Farm Manager
13.2.5	Fish fingerlings					
13.2.6	Any other, pl specify		Pickles	8	-	SMS (Home Science) &
			Amla products	2	-	Farm Manager

13.3 Technological information

	Category	Technological capsules / Number	Names of the team members involved
13.3.1	Technology backstopping to line departments		
		 Role of macro & micro nutrients in crop production In-situ soil & water conservation practices 	SMS (Soil Science)
	Agriculture	 Pod borer identification and management in Greengram Groundnut leaf minor and leaf spot: Early identification and management Maize Turcicum leaf blight identification and management Bt. Cotton leaf reddening management Bt. Cotton sucking pest management Bt. Cotton Blackarm and Alternania leaf spot disease identification and management Bengalgram pod borer and wilt identification and management Organic input preparation technology Azolla cultivation 	SMS (Agronomy)
		 Chemical weed management Seed priming with CaCl₂ for Rabi Sorghum Opening of conservation furrow for moisture conservation Compartment bunding for soil moisture conservation Nipping in Bengalgram & Redgram and its importance Contingent crop planning Foliar spray of KNO₃ for drought tolerance 	SMS (Agronomy)
	Horticulture	 Onion thrips and purple blotch identification and management Chilli murda complex identification and management Weed management in Onion Nutrient management in fruit crops Orchard management in Cashew crop ICM in Chrysanthemum Chilli pest and disease management Mango hopper and powdery mildew identification and management 	SMS (Horticulture)
	Animal Husbandry	Scientific Dairy Management technologies	Programme Assistant (Animal Husbandry)

	Category	Technological capsules / Number	Names of the team members involved
	Fisheries	-	-
	Others, pl. specify	Nutrition & importance of Nutri-Garden	SMS (Home Science)
		<u>Leaflets</u>	
		Scientific Dairy Management	Programme Assistant (Animal Husbandry)
		Soil & water conservation measures for dry land agriculture	SMS (Soil Science) & SMS (Agronomy)
		 Production technology in Greengram Intecropping in Maize with Redgram 	
		Integrated crop management in Bt. Cotton	
		Production technology in Groundnut	SMS (Agronomy) & SMS (Soil Science)
		Production technology in Bengalgram	
		Production technology in Sunflower	
		Production technology in Safflower	
13.3.2	Literature/publication	Krishi Vigyan Patrike	
13.3.2	Literature/publication	 Importance & methods of soil and water testing 	
		Soil & water conservation measures	SMS (Soil Science)
		Alternate land use systems	
		Role of nutrients for higher production	
		Production technologies in Onion	
		Tips on cultivation of onion & chilli	
		Weed management in onion	
		Onion seed production technology	SMS (Horticulture)
		Mango orchard management	
		Nutrient management in Mango	
		Post harvest management in Mango	
		Spiral separator	
		Importance & value addition in millets	SMS (Home Science)
		Bio-fortified crops	
		Compartment bunding for moisture conservation	0.10
		Production technology of Maize	SMS (Agronomy)
		Paired row method of sowing in Groundnut	

	Category	Technological capsules / Number	Names of the team members involved
		 Integrated nutrient management in Groundnut Wider row method of sowing in Sunflower Foliar spray of boron for seed setting in Sunflower Detopping and its importance in Bengalgram Paired row method of sowing in Rabi Sorghum CaCl₂ seed priming & its importance in Rabi Sorghum 	
10.00		Demonstration on enrichment of dry fodder and azolla cultivation	Programme Assistant (Animal Husbandry)
13.3.3	Electronic Media	Dryland agronomic practices for in-situ moisture conservation	SMS (Agronomy)
		Nutrition garden	SMS (Home Science)
		Soil Science aspects – 6 Nos.	SMS (Soil Science)
		Home Science aspects – 10 Nos.	SMS (Home Science)
	Kisan Mobile Advisory	Horticulture crop – 10 Nos.	SMS (Horticulture)
13.3.4	Services	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 2021-22

SI. 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)
		CFLDs in Greengram	50 hectares		SMS (Agronomy)
		CFLDs in Redram	50 hectares		SMS (Agronomy)
2 CFLDs on Pulses and Oils	CFLDs on Pulses and Oilseeds	CFLDs in Bengalgram	20 hectares		SMS (Agronomy)
		CLFDs in Summer Groundnut	20 hectares		SMS (Agronomy)

Details of Nutri Garden

Nutri Garden for year round nutritional security among farm families

Village: Shingatarayankeri (Mundaragi), Shirol (Gadag), Chikkasavanur (Shirahatti)

Problems	Technology to be demonstrated
 Lack of awareness about nutrition & nutri garden Less consumption of vegetables due to high price of vegetables and fruits Lack of awareness on super foods 	 Production of vegetables Planting of perennial nutritious plants 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-PKM 1, Papaya-Solo, curry leaf-Suhasini, Guava-Lucknow 14 & Apple Ber)	02 unit	300	25	25000	Quantity of vegetables produced (Kg) Economics
Vegetable seeds (Brinjal. Okra, Beans, Cucumber, Tomato, Chilli, Betroot, Carrot etc.)	200 gms	250			Percent adequacy of vegetables
Leafy vegetables (Amaranth, Palak, Dil, Coriander, Methi, Rajagiri etc.)	100 gms	250			
Bio-fertilisers	1 Kg	100	_		
Super foods (Chia & Grain Amaranth)	50 gms	100			
Barrel supported drip irrigation shall be provided at farmers' cost			1		
	Total	1000			

14.B. EDP ON BYADAGI CHILLI

Byadagi Chilli is one of the important crop and is selected by Government of India under ODOP programme for Gadag district. The Byadagi Chilli is known for its flavour, colour and mild pungency and has got great demand in national and international market. Even then farmers sell the produce without value addition which fetches low price in the market. To get remunerative price for the produce and to promote chilli processing & value addition activities, the establishment of small and micro enterprise is very important. In this direction KVK proposed Entrepreneurship Development Programme on processing and value addition of Red Chilli.

Objectives

- 1) To promote and marketing of Chilli value added products
- 2) To promote entrepreneurship development among farm women and youth
- 3) To create additional income through EDP

Products to be prepared

- 1) Red Chilli powder
- 2) Masala Chilli powder
- 3) Chilli pickle
- 4) Methi chillies

Materials required

1) Sealing machine : Rs.3500
2) Weighing machine : Rs.4000
3) Lab testing of products : Rs.6000
4) Window pouches of 100 gms, 250 gms : Rs.9000

(1000 Nos each)

5) Bottles for packing : Rs.2500

Chilli pickle -250 Nos.

6) Labels : Rs.5000

Total : Rs.30000

14.C

CFLD (CLUSTER FRONT LINE DEMONSTRATIONS)

i) Pulses:

SI. No.	Name of the crop	No. of demonstrations	Area (ha)				
	Kharif 2021-22						
1	Greengram	25	10				
	Ra	bi 2021-22					
3	Bengalgram	25	10				
	Total	50	20				

ii) Oilseeds:

SI. No.	Name of the crop	No. of demonstrations	Area (ha)
	Summer 2021-22		
1	Groundnut	50	20

15. Revolving fund

15.1 Financial status of revolving fund

Opening balance as on	Expenditure incurred during	Receipts during	Closing balance as on	Expected closing balance by
01.04.2020	2020-21	2020-21	31.01.2021	31.03.2021(Including value of
(Rs.in Lakh)	(Rs.in Lakh)	(Rs.in Lakh)	(Rs.in Lakh)	material in stock/ likely to be
				produced)
3.68	12.67	9.82	0.83	3.00

15.2 Plan of activities under revolving fund during 2021-22

SI. No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
1	Production of pickles and amla products	10 Qtls	120000	SMS (Home Science) & Farm Manager
2	Onion seed production	5 Qtls	200000	SMS (Horticulture) & Farm Manager
3	Mango grafts	500 Nos.	5000	SMS (Horticulture) & Farm Manager
4	Tamarind grafts	600 Nos.	6000	SMS (Horticulture) & Farm Manager
5	Cashewnut grafts	2000 Nos.	40000	SMS (Horticulture) & Farm Manager
6	Vermicompost production	20 ton	80000	SMS (Soil Science) & Farm Manager
7	Vermiwash	500 liters	20000	SMS (Soil Science) & Farm Manager
8	Earthworms	2.5 Qtls	75000	SMS (Soil Science) & Farm Manager
9	Milk production	3600 liters	126000	Programme Assistant (Animal Science) & Farm Manager
10	Calves, Lamb & kids production	25 Nos.	75000	Programme Assistant (Animal Science) & Farm Manager

16. Activities of soil, water and plant testing laboratory during 2021-22

SI.	Type of samples	No. of samples to be analyzed	Names of the team members involved
No.			
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 2020-21

SI. 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	-	
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)

SI. No	Activities planned	Remarks if any
1	Training to farmers and farm women on rain water harvesting	-
	(7 programmes, 210 participants)	
2	Training to extension functionaries on rain water harvesting (1 programme, 25 participants)	-
3	Facilitation for conservation of rain water harvesting through borewell and openwells	-
	(5 Nos.)	

19. Farmers Field School (FFS) planned: NIL

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. Virtual Farmers School (VFS) planned:

<u>Introduction</u>: COVID-19 pandemic has turned the World upside-down and it has become very difficult to reach the farming community and deliver the advisories. It has become inevitable for organization like KVK to adopt alternate ways of technology dissemination during the period of pandemic using the digital technologies. In this context, KVK Gadag proposes to conduct two "Virtual Field School" in Mango crop which is the important commercial crop of Gadag district.

Objectives of Virtual Field School:

- To disseminate knowledge in different phases on production process of Integrated Crop Management Practices in Red Chilli and Mango through live streaming.
- To promote learning on real time basis on actual field situation through virtual means.
- To create a forum for interaction between Scientists and Chilli and Mango Growers for solving field level problems on real time basis.

<u>Process of conducting Virtual Farmers School (VFS)</u>:

- Selection of progressive one Mango Growing Farmer as a Facilitator for the field school
- Selection of Mango Growers having Android mobile phone as students for the field school
- Prioritization of problems affecting the productivity
- Conductance of Live streaming of virtual technical sessions in field school and video recording of each session
- Documentation of activities and feedback from each session

Technical Sessions planned for Virtual Farmers School (VFS) on ICM in Mango crop :

SI. No	Details of the session	Month
1	Sanitation of orchard, pruning and fertilizer application	June, 2021
2	Management of shoot weevil, borer and stem borer	July, 2021
3	Management of foliage diseases (powdery mildew, rust etc.)	August-September, 2021
4	Management of plant hoppers and micronutrient spray	October, 2021
5	Management of sucking pests	(i) December, 2021 (ii) January, 2022
6	Management of blossom end rot, fruit fly and micronutrient application and irrigation management	March, 2022
7	Post harvest management of Mango fruits	April to May, 2022

Budget for conductance of Virtual Farmers School (VFS) Sessions :

SI. No	Particulars	Amount (Rs.)	
VFS or	VFS on ICM in Mango crop		
1	Critical inputs for conducting ICM in Mango crop (0.2 hectares)	7500	
2	FFS Kit	2000	
3	Literature / reading material for 20 Mango Growers	2500	
4	Stationary, POL and other expenditure	8000	
5	Live streaming equipments expenditure	10000	
	TOTAL BUDGET	30000	

21. Details of budget utilization (2020-21)

(Rs.)

S. No.	Particulars	Sanctioned	Released	Expenditure
	curring Contingencies			
1	Pay & Allowances	20262127	20262127	20262127
2	Traveling allowances	78000	78000	78000
3	Contingencies			
Α	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	290000	290000	290000
В	POL, repair of vehicles, tractor and equipments	334000	334000	334000
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	100000	100000	100000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	50000	50000	50000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	283000	283000	283000
F	On Farm Testing (on need based, location specific and newly generated information in the major production systems of the area)	136000	136000	136000
G	Integrated Farming System	0	0	0
Н	Training of Extension Functionaries	25000	25000	25000
1	Extension activities	41000	41000	41000
	EDP / Innovative activities	30000	30000	30000
J	Maintenance of buildings	50000	50000	50000
Κ	Establishment of Soil, Plant & Water Testing Laboratory and issue of Soil Health Cards	25000	25000	25000
М	Nutri Garden	25000	25000	25000
N	Library Maintenance	10000	10000	10000
	TOTAL (A)	21739127	21739127	21739127
B. No	n-Recurring Contingencies			
1	Works	0	0	0
2	Equipments including SWTL & Furniture	243000	243000	243000
3	Vehicle (Four wheeler/Two wheeler, please specify)	0	0	0
4	Library (Purchase of assets like books & journals)	0	0	0
TOTA	\setminus I	0	0	0
	VOLVING FUND	0	0	0
GRAN	ND TOTAL (A+B+C)	21982127	21982127	21982127

22.Details of Budget Estimate based on proposed action plan(2021-22)

SI.No.	Particulars	BE 2021-22 proposed (Rs.)
22.1	(A). REVENUE (Recurring Contingencies)	
21.1.1	Pay & Allowances	21586000
22.1.2	Traveling allowances	100000
22.1.3	Contingencies	
22.1.3.a	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	250000
22.1.3. <i>b</i>	POL, repair of vehicles, tractor and equipments	100000
22.1.3. <i>c</i>	Food/refreshment for farmers / extension personnel @ Rs.150/person/day	100000
22.1.3. <i>d</i>	Training material (need based materials and equipments for conducting the training)	50000
22.1.3.e	Frontline demonstrations	400000
22.1.3. <i>f</i>	On farm testing (OFTs)/Technology Assessment	200000
22.1.3.g	Integrated Farming System (IFS) (Min. 5 Units)	0
22.1.3. <i>h</i>	Training of extension functionaries	50000
22.1.3. <i>i</i>	Extension activities/services	50000
22.1.3. <i>j</i>	Farmers' Field School	0
22.1.3. <i>k</i>	EDP (2 Nos.) / innovative activities	60000
22.1.3. <i>I</i>	Soil & water testing & issue of soil health cards	50000
22.1.3. <i>m</i>	Maintenance of building	0
22.1.3. <i>n</i>	Library (Purchase of Journals, Periodicals, News Papers& Magazines)	10000
22.1.3.0	Nutri Garden	25000
	Total Recurring (A)	23031000
22.2	(B). CAPITAL (Non-Recurring Contingencies)	
22.2.1	Equipments& Furniture	
22.2.2	Works (Hostel building repair works)	900000
22.2.3	Vehicle	
22.2.4	Library	
	Total Non Recurring (B)	900000
	Grand Total (A + B)	23931000