# ICAR-ATARI, ZONE-XI, BENGALURU

# **PROFORMA FOR ACTION PLAN 2021-22**

# **GUIDELINES** (Please read carefully before preparing action plan)

- 1. It is mandatory to fill all the items of activities in the format. Further, additional activities within the mandate which are relevant to increase income of farmers in the operational villages will be encouraged.
- 2. For the activities proposed to be continued, all the data of the previous year(s) must be presented, supported by visuals.
- 3. Integrate all the ongoing major schemes like CFLDs, Seed Hub, NICRA, ARYA, Sujala, ASCI skill training, KKAetc as well as sponsored projects such as state/central sector projects, host organization activities and other agencies in the selected DFI villages.
- 4. Villages where ongoing projects are implemented may be considered on priority as cluster villages (operational) for KVK action plan.
- 5. Household as a whole need to be emphasized with possible interventions to achieve significant increase in income within a short period of time. KVK can plan to cover all households in a phased manner.
- 6. Decide on the number of households to be covered in each village based on schemes implemented and budget available.
- 7. Plan to involve all sections of the community and households (women, youth, SC/ST etc).
- 8. Action plan should include a combination of OFTs, FLDs, training and extension activities to achieve higher productivity/income.
- 9. Entire KVK team must be involved in the preparation of action plan for combination of interventions.
- 10. In the case of FLDs on varietal performance, ensure that the varieties / hybrids are not older than 10 years.
- 11. Vocational trainings, EDPs and Market interventions should be planned for value-chain oriented activities of the major crops/commodities.
- 12. Recommendations of SAC related to technical activities should be addressed in the action plan.

# ICAR-ATARI, ZONE -- XI, BENGALURU

# **PROFORMA FOR ACTION PLAN OF KVKs IN ATARI, ZONE XI FOR 2021-22**

#### 1. General information about the KrishiVigyan Kendra

1.1	Name and address of KVK with phone, fax and e- mail ID	:	ICAR-Krishi Vigyan Kendra, Hanumanamatti, Ranebennur Taluk, Haveri District, Karnataka State Ph: 08373-253524, Fax: 08373-253524
			Email: kvk.Haveri@icar.gov.in / kvk_haveri@rediffmail.com
1.2	Name and address of host organization	:	University of Agricultural Sciences, Krishi Nagar, Dharwad
1.3	Year of sanction	:	1976
1.4	Website address of KVK and date of last update	:	www.kvkhaveri.com and last updated on December 2020

#### 2. Details of staff as on date

SI.	Sanctioned post	Name of the	Discipline	If permanent indicat	* 1	Date of	If temporary, pl. indicate the
No.	Sanctoned post	incumbent	Discipline	Current pay band	Current grade pay	joining	consolidated amount paid (Rs./month)
2.1	Senior Scientist & Head/PC	Dr. P. Ashoka	Agronomy	37400-67000	9000	03.02.18	-
2.2	Subject Matter Specialist	Dr. Rajkumar. G.R	Soil Science	15600-39100	7000	16.07.19	
2.3	Subject Matter Specialist	Dr. K. P. Gunndannavar	Ag. Entomology	15600-39100	7000	05.06.17	-
2.4	Subject Matter Specialist	Dr. Shivamuruty D	Agronomy	15600-39100	6000	21.02.18	-
2.5	Subject Matter Specialist	Dr. Santosh H. M	Horticulture	15600-39100	6000	22.07.19	
2.6	Subject Matter Specialist	Dr. Mahesh Kadagi	Animal Science	15600-39100	6000	13.07.19	
2.7	Subject Matter Specialist	Vacant	Home Science	-	-	-	-
2.8	Programme Assistant (Lab )	Mr. Kishna Naik L	Programme Assistant (Lab)	9300-34800	4200	09.05.17	-
2.9	ProgrammeAssistant (Computer Programmer)	Mr. Chandrakant Kotabagi	Technical Officer (computer)	9300-34800	4600	03.03.21	-
2.10	Programme Assistant (Farm Manager)	Mr.Kallesh D T	Technical officer (Farm Management)	9300-34800	4600	14.07.16	-
2.11	Accountant/Superintendent	Mr. C. R. Arkachari	Assistant	43100-83900	-	23.03.20	-
2.12	Stenographer	Shivappa Hanni	Stenographer	40900-78200	-	24.01.19	-
2.13	Driver 1	Santosh Naik	Driver (LMV)	11600-21000	-	02.04.18	-
2.14	Driver 2	Vacant	-	-	-	-	-
2.15	Supporting staff 1	K. B. Belakeri	Supporting staff Grade-II	10400-16400	-	01.07.02	-
2.16	Supporting staff 2	Basavaraj Nelogal	Supporting staff Grade-II	10400-16400	-	-	-

## **3. Details of SAC meeting conducted during 2020-21**

Date	Major recommendations	Status of action taken in brief	Reasons for no actions, if any
15.11.2020	Suitable control measure for purple blotch disease in onion	FLD on Onion is planned to overcome the problem	-
15.11.2020	Suitable control measures for reddening of maize crop	Suggested to apply soil test based fertilizers	-
15.11.2020	Awareness campaign on farm mechanization, PHT and Value addition in food crops	Action will be taken	-
15.11.2020	Prepare action plan problems in major crops based on suggestion by the line department officials	Action plan prepared as per problems identified by line department officials for growing of major crops in Haveri district	-
15.11.2020	Prepare suitable action plan for growing of pulses and oilseed crops after harvesting of paddy during Rabi season	Implemented FLD on Greengram in Paddy harvested fields	-
15.11.2020	Each year analyze 3000 soil sample and provide training on soil health management	Action initiated	-
15.11.2020	Prepare soil fertility map of Haveri district based on NBSS & LUP module	Action initiated	-
15.11.2020	Training programme for line department officials	Action initiated	-
15.11.2020	Suitable control measures for management of snails in Beetle vine orchard	Action initiated	-
15.11.2020	Suitable control measures for management of Rhizome rot disease in Ginger	Trainings will be conducted during cropping season	-
15.11.2020	Provide information on weed management in Maize, application of nutrients and high yielding varieties in Groundnut	Information will be given	-
15.11.2020	Plant protection measures in Mulberry crops	FLD has been planned for the year 2021-22	-
15.11.2020	Invite the bank officials for major programmes organized by KVK	Action will be taken	-
15.11.2020	Organize seminars and training on Jasmine and Mango	Action will be taken	-
15.11.2020	Prepare production technology on Bamboo	Trainings will be conducted	
15.11.2020	Send proposal to UAS Dharwad for establishment of CSR at KVK office	Action initiated	-

## 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				
Baradur	Groundnut	<ul> <li>Use of local variety,</li> <li>Imbalanced nutrition ,</li> <li>Poor pest and disease Management</li> <li>No seed treatment</li> </ul>	2000 ha	FLD: Integrated Crop Management in Groundnut
	Black gram	<ul> <li>Low yield due to severe</li> <li>Yellow mosaic virus disease</li> <li>Use of local variety</li> <li>Photo sensitivity</li> <li>Non availability of new variety</li> </ul>	600 ha	OFT: Assessing the performance of the Black gram varieties
	Bengalgram	<ul> <li>Low yield</li> <li>Improper nutrient management</li> <li>Wilting</li> </ul>	2000 ha	FLD: Demonstration of Bengalgram Variety Jaki- 9218 and nutrient management
Cluster B				
Bishettikoppa				
	Maize	<ul> <li>Non availability of university hybrids,</li> <li>Lack of disease and drought resistant.</li> <li>Low yield</li> </ul>	2500 ha	OFT: Assessment of Maize hybrids for higher yield and economics
	Rabi sorghum	<ul> <li>Low yield due to use of local variety</li> <li>Lodging and poor fodder quality</li> </ul>	31878 ha	FLD: : Demonstration of Rabi sorghum variety SPV-2217
Cluster C				
Shigihalli		•		
	Soybean	<ul> <li>Use of local variety</li> <li>No seed treatment</li> <li>Improper nutrient management</li> <li>Lack of knowledge about pest and disease management</li> </ul>	300 ha	FLD: Demonstration of soybean variety DSb-34
	Sugarcane	<ul> <li>Low yield (50 t/ha),</li> <li>Poor management practice</li> <li>Lack of awareness on new varieties</li> <li>Non availability dual purpose variety (sugar and Jaggery purpose)</li> </ul>	800 ha	FLD: Demonstration of Sugarcane variety Co-9004 for higher yield and income

	Mango	• Use of banned chemicals for mango fruits artificial ripening	5600 ha	OFT: Assessment of ripening methods in Mango (Var.Alphanso)
		• Low income		
		Poor consumer acceptance		
		• Loss in fruit weight		
	Fodder crops	• Scarcity of green fodder (20%)	-	FLD: Demonstration on improved
	-	• Low milk yield and poor quality milk		varieties Fodder crops and fodder tree
	Maize	• Excess urea top dressing in Maize	1,85,000 ha	OFT: Assessment of Nano-Nitrogen
		No Soil Testing		application in Maize
	Greengram	• Low yield due to use of local variety, pest incidence	1000 ha	FLD: Integrated Crop Managament in
		• Lack of uniform maturity		Greengram
	Nutrition Garden	• Lack of awareness about nutrition & Nutrition garden	-	FLD: Nutrition Garden
		Malnutrition		
		Fluctuation in vegetable prices		
Cluster D				
Yadagodi			2001	
	Tomato	• Low yield	200 ha	FLD: Management of pin worm in
		• Low quality fruits		Tomato
		Incidence of pin worm	5001	
	Onion	• Low yield (160-180q/ha)	500 ha	FLD: Management of purple blotch
		High incidence of purple blotch		disease in Onion
		Incidence of thrips	10001	
	Garlic	Incidence of Root grub	1999 ha	FLD: IPDM in Garlic
		• Low yield		
		• High purple blotch		
		Incidence of thrips		
	Fish farming	• Poor growth for existing common carp	-	FLD: Demonstration of Amur fish
		• Low yield due to early breeding	1000 4	farming in Farm ponds
	Chilli	• Improper soil and nutrient management	6880 ha	FLD: ICM in Chilli
		• Nutrient deficiencies (Zn, Fe)	10001	
	Garlic	• Low yield (5 t/ha)	1999 ha	OFT: Assessment of Garlic varieties
		• Less no. of cloves/bulb (<14)		for high yield
		• Purple blotch disease incidence (15-20 %)		
		• Low bulb weight (< 7 gm)		
	Banana	• Low yield (22t/ha), reduced bunch weight (10 Kg/bunch), poor filling of fingers, fruit cracking and micronutrient deficiency	2263 ha	FLD: Bunch care technologies to maximize yield in banana
	Livestock	• High incidence of mastitis, low response to treatment	30 %	FLD: Demonstration on clean milk
		• High antimicrobial resistance		production

		<ul><li>Loss of milk production</li><li>Decreased value of animal</li></ul>		
	Ginger	<ul> <li>Decreased value of annual</li> <li>Low yield (28t/ha), poor crop growth, rhizome rot disease incidence (30-35%), reduced use efficiency of fertilizers and micronutrient deficiency</li> </ul>	947 ha	FLD: Demonstration of bio capsules and Ginger special for enhancing yield in Ginger
	Foxtail millet	<ul> <li>Low yield (8 q/ha), Poor management practice</li> <li>Lack of awareness on new varieties</li> </ul>	500 ha	OFT: Assessment of Foxtail millet varieties for higher yield under rainfed situation
	Sunflower	<ul> <li>Lower yield</li> <li>Susceptibly to Necrosis.</li> <li>Non availability of Hybrids</li> </ul>	2369 ha	OFT: Assessment of sunflower Hybrids during late Kharif season
	Fodder crops	• Scarcity of green fodder ( 20%), Low milk yield and low quality milk	-	FLD: Demonstration on improved varieties Fodder crops and fodder tree
Cluster E Choudadanapur				
Choudadanapur	Maize	<ul> <li>Improper soil and nutrient management</li> <li>Nutrient deficiencies (P, K, Zn, B)</li> </ul>	1,85,000 ha	FLD: Soil and nutrient Management in Maize
	Bt-Cotton	<ul> <li>Improper soil and nutrient management</li> <li>Nutrient deficiencies (Mg, Zn, B), Leaf reddening, flower drop</li> </ul>	69947 ha	FLD: Nutrient Management through foliar application in Bt-Cotton
	Paddy	<ul> <li>Low yield (16-18 q/ac)</li> <li>Lack of knowledge about Biofertilizer</li> <li>Excess use of fertilizer</li> <li>BPH infestation (30%)</li> <li>Blast (35-40 %)</li> </ul>	46179 ha	FLD: Integrated crop management in transplanted Paddy
	Guava	<ul> <li>Incidence of Tea mosquito bug(35-40%),</li> <li>low fruit yield and market price</li> </ul>	111 ha	OFT: Assessment of Management strategies for Tea Mosquito bug in Guava
	Livestock	<ul> <li>High incidence of mastitis, low response to treatment</li> <li>High antimicrobial resistance</li> <li>Loss of milk production Decreased value of animal</li> </ul>	30 %	FLD: Demonstration on clean milk production

#### 5. Technology assessment during 2021-22

Sl.No.			Title of ervention	Technology options	Sourceof technology	Name of critical input	Qty per trial (q)	Cost per trial (Rs.)	No. of trials	Total cost (Rs.)	Parameters to be studied	Team member s
--------	--	--	-----------------------	--------------------	------------------------	---------------------------	----------------------------	-------------------------------	---------------------	------------------------	--------------------------------	---------------------

5.1		Low yield	Assessment of	TO <sub>1</sub>	Farmers' practice	_	I _	_	-	03	1260/-	• Grain yield	• Sr. Sci.
5.1		(10q/ha),	Foxtail millet	TO <sub>2</sub>	DHFt-109-3	UAS,	T 2-Seeds	3 kg/ac	150	05	1200/-	(q/ha)	• SI. SCI. & Head
	et	Poor	varieties for	102		Dharwad	Azospirillum	500 g	60			• Fodder	• Ag.
	Foxtail millet	managemen	higher yield	TO3	H N-46	UAS,	T 3-Seeds	3 kg/ac	150			yield (t/ha)	Entom
	uil 1	t practice	under rainfed			Raichur	Azospirillum	500 g	60			• Economics	ology
	oxta	Lack of	situation					Total	420/-			(Rs)	
	Fc	awareness											
		on new											
		varieties			T								
5.2		• Lack of	Assessment of	TO <sub>1</sub>	Farmers' practice	-	-	-	-	03	4800/-	• Number of	<ul> <li>Agrono</li> </ul>
		drought	Maize hybrids	$TO_2$	RCRMH2	UAS,	T 2-Seeds	08 kg	800/-			cobs/plant,	my
		resistant	for higher			Raichur						,	• Ag,
	o	maize	yield	TO3	GH-150125	UAS,	T 3-Seeds	08 kg	800/-			• Disease	Ento,
	Maize	hybrids				Dharwad				-		incidence	• Soil
	M	• Low yield						Total	1600/-			(%),	Science
		(< 50q/ha)										• Yield (q)	• Animal
												and	Science
												Economics (Rs)	• Sr. Sci.
				-						05	0000	. ,	& Head
5.3		• Low yield	Assessment of	$TO_1$	Farmers practice	-	-	-	-	05	9000	• Head size	• Sir Sci
		(10-12 %)	sunflower Hybrids for	TO <sub>2</sub>	RSFH-1887	UAS,	Seeds	02 kg	800			(cm)	& Head
	<b>_</b>	• Long duration (	higher yield			Raichur	Bio fertilizer	200 g	100			• Yield (q/ha)	• Ag. Ento
	Sunflower	more than	inglier yield	TO3	KBSH-78	UAS	Seeds	02 kg	800			• Pest &	Ento
	uflc	110 days)				Bengaluru	Bio fertilizer	200 g	100			• Fest & disease	
	Sur	• Low oil					Dio tertifizer	Total	1800			incidence	
		content						rotur	1000			(%)	
		Content										Economics	
												(Rs)	
5.4		<ul> <li>Low yield</li> </ul>	Performance	TO <sub>1</sub>	Farmers' practice	-	-	-	-	03	1980/-	• No. of	Agrono
		due to	of the Black		(DU-1)							Branches	my
		severe	gram	TO <sub>2</sub>	DBGV – 5	UAS,	DBGV – 5	3 kg	330			per plant,	• Ag,
		yellow	varieties for	102	DDOV = J	Dharwad	DBOV = 3	JKg	550			• Pods per	Ento,
		mosaic	higher yield			Diaiwad						plant	• Soil
	В	virus		TO3	LBG 791	ARS, Lam,	LBG 791	3 kg	330			• Grain yield	Science
	Black gram	disease		100		AP		2 18	220			(ha)	• Sr. Sci.
	ick	• Use of local						Total	660			• Disease	& Head
	Bla	variety										Incidence	
												(%)	
5.5	B	• Low yield	Assessment of	TO <sub>1</sub>	Local	-				03	27,000/-	• Yield	• Scienti

		<ul> <li>(5 t/ha)</li> <li>Less no. of cloves/bulb (&lt;14)</li> <li>Purple blotch disease incidence (15-20 %)</li> <li>Low bulb weight (&lt; 7 gm)</li> </ul>	Garlic varieties for higher yield	TO <sub>2</sub> TO <sub>3</sub>	AAS-2 DWD-G1	UHS, Bagalkot UAS, Dharwad	AAS-2 garlic cloves DWD-G1 garlic cloves	50 kg 50 kg Total	4500 4500 9000			<ul> <li>(Q/ha)</li> <li>Bulb weight (gm)</li> <li>Purple blotch disease (%)</li> <li>Thrips incidence (%)</li> <li>Days to harvest</li> <li>Economics (Rs)</li> </ul>	st (Hortic ulture) • Scienti st (Entom ology) • Sr Sci & Head
5.6	Mango	<ul> <li>Use of banned chemicals for mango fruits</li> <li>artificial ripening</li> <li>Low income</li> <li>Poor</li> </ul>	Assessment of ripening methods in Mango (Var.Alphans o)	TO <sub>1</sub> TO <sub>2</sub> TO <sub>3</sub>	Spreading of fruits as layer over paddy straw for a week to ripen Dipping of unripe mango fruits in 0.1% Ethrel solution and wipe it to dry In air tight rooms, unripe fruits	Farmer practice UHS, Bagalkot IIHR, Bangalore	- - Ethrel Sodium hydroxide	- - 1 lit 500 gm	2100 100	03	12200	• Fruit Weight loss (%), Ripening rate (Days), Overall consumer acceptance, Economics	<ul> <li>Scienti st (Hortic ulture)</li> <li>Scienti st (Entom ology)</li> <li>Sr Sci &amp; Head</li> </ul>
	Mar	<ul> <li>consumer acceptance</li> <li>Loss in fruit weight during ripening (10%)</li> <li>Uneven ripening, fruits dessication</li> </ul>			exposed to Ethylene gas liberated by mixing Ethrel and sodium hydroxide	Dangalore	Air tight portable plastic tents (1 ton capacity)	02 no. Total	10000				
5.7	Guava	<ul> <li>Incidence of Tea mosquito bug(35- 40%),</li> <li>low fruit yield and market price</li> </ul>	Assessment of Management strategies for Tea Mosquito bug in Guava	TO <sub>1</sub> TO <sub>2</sub> TO <sub>3</sub>	Farmers' practice Application of Cypermethrin @ 0.5 ml/L of water at fortnight interval (2-3 times) from flowering stage Application of Lambdacyhalothrin @ 0.5 ml/L of water + Pongamia	– UHS Bagalkote IIHR Bengalore	- Cypermethrin Lambdacyhalothrin Pongamia oil	- 500 ml 500 ml 5 L	- 500/- 500/- 500/-	03	4,500/-	<ul> <li>Fruit Yield (t/ha)</li> <li>Fruit damage (%) Economics (Rs)</li> </ul>	<ul> <li>Ag. Ento</li> <li>Agrono my</li> <li>Soil Science</li> <li>Sr Sci &amp; Head</li> </ul>

					oil 2% at fortnight interval (2-3 times) from flowering stage			Total	1500/-				
5.8	Maize	<ul> <li>Excess urea top dressing in Maize</li> <li>No Soil</li> </ul>	Assessment of Nano- Nitrogen application in Maize	TO <sub>1</sub> TO <sub>2</sub>	Farmer Practice 100 Kg N / ha	UAS Dharwad	Nano-N (4 ml / L) Soil Testing	500 mL x 2 02 Total	500 400 900/-	03	4500/-	<ul> <li>Cob length (cm), test weight (g),</li> <li>yield (ha)</li> <li>Economics (Rs)</li> </ul>	<ul> <li>Soil Science</li> <li>Ag, Ento,</li> <li>Agrono my</li> </ul>
		Testing		TO <sub>3</sub>	Use of Nano nitrogen (Liquid 4 ml/liter, 500 ml per acre-2 sprays) along with soil application of 80 kg N / ha	IFFCO Ltd.						• Initial nutrient status of soil	• Sr. Sci. & Head

## 6. Frontline demonstrationsduring 2021-22

Sl.No	Category	Crop/ enterpris e	Prioritized problem	Technology to be demonstrate d	Name of variety	Name of hybri d	Source of technolog y	Name of critical input	Qty per demo (q)	Cost per demo (Rs.)	No. of dem os	Total cost for the demo (Rs.)	Parameters to be studied	Team members			
6.1	Cereals										10	10000/					
			<ul> <li>Improper soil and</li> </ul>	Nutrient Management	-	-	UAS Dharwad	ZnSO4	4 kg	320	10	10000/-	<ul> <li>Nutrient status of soil : Initial</li> </ul>	<ul> <li>Soil Science</li> </ul>			
			nutrient	in Maize			Dilai wadi	WS mixture 19:19:19	2 kg	280			and after harvest	• Ag,			
		Maize	managem ent					Azospirillu m	250 ml	200			• Cob length (cm), test weight (g),	Ento, • Agrono			
		Z.	• Nutrient					PSB	250 ml	200			and yield(ha) and Economics(Rs)	my			
			deficienci es (P, K,						Total	1000/-				<ul> <li>Sr. Sci. &amp; Head</li> </ul>			
			Zn)	Integrated	DGGV	-	UAS	Seeds	5 V a	600	10	11000/	Grain Yield	• Sr. Sci.			
			• Low yield,	Integrated Crop	-2	-	Dharwad	(DGGV-2)	5 Kg	000	10	11000/-	• Grain Field (q/ha)	• Sr. Sci. & Head			
		E	Improper	Management				Trichoderm	50 gm	20			• Economics	<ul> <li>Agrono</li> </ul>			
		Greengram	nutrient	in Green				a	• • • •	10				• Ag. Ento.			
		Ireel	managem	gram				Rhizobium	200 gm	40	-						
									PSB Pulse Magic	200 gm 2 Kg	40 400	-			Ento.		
								T uise Mugie	Total	1100	-						
			<ul><li>Low yield</li><li>Improper</li></ul>	Demonstratio n of Bengal	Jaki- 9218	-	UAS Dharwad	Seeds Jaki- 9218	25kg	1650/-	10	19800	<ul><li> Plant height</li><li> Number of pods/</li></ul>	<ul> <li>Soil Science</li> </ul>			
		В	nutrient	gram Variety				Rhizobium	0.25kg	40/-			plant	<ul> <li>Agrono</li> </ul>			
		gra	managem	Jaki- 9218				PSB	0.25kg	40/-			• % disease	my			
		Bengal gram	• Wilting					Micronutrie nt Zn-EDTA	200 g	250/-			• Grain yield	• Ag. Entomol			
		H	(15-20 % )						Total	1980			q/ha • Initial nutrient status	ogy • Sr. Sci & Head			
			fertility crop					Integrated - crop	-	UAS Dharwad	Carbendazi m	100 g	50	10	13900	• No. of panicle / Plant	<ul> <li>Sr. Sci.</li> <li>&amp; Head</li> </ul>
				management				Azospirillu m	500 g	40			<ul><li>Test weight (g)</li><li>Pest and disease</li></ul>	<ul> <li>Agrono my</li> </ul>			
		Pa	q/ac) • Lack of	transplanted Paddy				Thiomethax am	100 g	300	_	0	300	incidence (%	<ul> <li>Fest and discuse incidence (%)</li> <li>Grain yield (ha)</li> </ul>	• Ag. Ento.	
			knowledg	-				Tricyclazole	• Grain yiel	Siam yield (iid)	2						

			<ul> <li>e about Biofertili zer</li> <li>Excess use of fertilizer</li> <li>BPH infestatio n</li> <li>Blast incidence</li> </ul>						Total	1390			• Economics (Rs)	
		Rabi sorghum	<ul> <li>Low yield due to use of local variety</li> <li>Lodging and poor fodder quality</li> </ul>	Demonstratio n of Rabi sorghum variety SPV- 2217	SPV- 2217	-	UAS Dharwad	Seeds Trichoderm a Azospirillum ZnSO4 Soil analysis	3 kg 250 g 250 g 6 kg - Total	210/- 30/- 30/- 760/- 400/- 1760/-	10	17600/-	<ul> <li>Plant height (cm) at harvest</li> <li>Grain Yield (q/ha)</li> <li>Economics (Rs)</li> </ul>	<ul> <li>Sr. Sci. &amp; Head</li> <li>Agrono my</li> <li>Ag. Ento.</li> </ul>
		Bt-Cotton	<ul> <li>Improper soil and nutrient managem ent</li> <li>Nutrient deficienci es (Mg, Zn,, Leaf reddening , flower drop</li> </ul>	Nutrient Management through foliar application in Bt-Cotton	-	-	UAS Dharwad	Zn-EDTA form Borosol KNO3	375 / 100 g 275 / kg 140 / kg Total	750 550 280 1580	10	15800	<ul> <li>No. of bolls per plant,</li> <li>Pest and Diseases incidence (%)</li> <li>yield (q/ha) and economics</li> </ul>	<ul> <li>Soil Science</li> <li>Ag, Ento,</li> <li>Agrono my</li> <li>Sr. Sci. &amp; Head</li> </ul>
6.2	Millets	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3	Oilseeds	Soybean	<ul> <li>Use of local variety</li> <li>Lack of knowledg e about Biofertili zer Poor nutrient managem ent</li> <li>Lack of</li> </ul>	Demonstratio n of soybean variety DSb- 34	DSb-34	-	UAS Dharwad	DSb-21 Trichoderm a PSB Rhizobium Metarhizium rileyii	25.0 kg/ac 250 gm 250 gm 1 kg total	1800/- 35/- 25/- 25/- 250/- 2535/-	05	12,675/-	<ul> <li>Yield (q/ha)</li> <li>Rust incidence (%)</li> <li>Economics (Rs)</li> </ul>	<ul> <li>Ag. Ento</li> <li>Agrono my</li> <li>Soil Sci</li> <li>Sr. Sci. &amp; Head</li> </ul>

		Groundnut	<ul> <li>knowledg</li> <li>e pest</li> <li>and</li> <li>disease</li> <li>managem</li> <li>ent</li> <li>Use of</li> <li>local</li> <li>variety,</li> <li>Imbalanc</li> <li>ed</li> <li>nutrition</li> <li>Poor pest</li> <li>and</li> <li>disease</li> <li>managem</li> <li>ent</li> <li>No seed</li> <li>treatment</li> </ul>	Integrated Crop Managemen t in Groundnut	G2-52	-	UAS Dharwad	Pods Rhizobium PSB Trichoderm a ZnSO4 FeSO4	60 kg 200 g 200 g 200 g 10 kg 10 kg Total	4500/- 50/- 50/- 70/- 650/- 5970/-	05	29850/-	No. of pods/plant, Incidence of pest and disease, Yield and economics	<ul> <li>Agrono my</li> <li>Ag. Ento</li> <li>Soil Sci</li> <li>Animal Sci.</li> <li>Sr. Sci. &amp; Head</li> </ul>
6.4	Pulses	I	-	-	-	-	-	-	-	-	-	-	-	-
6.5	Commercial crops	Sugarcane	<ul> <li>Low yield (50 t/ha),</li> <li>Poor managem ent practice</li> <li>Lack of awarenes s about new varieties</li> <li>Non availabili ty dual purpose variety (sugar and Jaggery purpose)</li> </ul>	Demonstrati on of Sugarcane variety Co- 9004	Co- 9004	-	UAS, Dharwad	Sugarcane setts Gluconacet obacter ZnSO4 FeSO4	1.5 t 2.0 l 10 kg 10 kg	4500/- 800/- 1000/- 1000/- 7300/-	05	36,500/	<ul> <li>Plant height (cm)</li> <li>Number of tillers per plant</li> <li>Incidence of pest and disease (%)</li> <li>Yield (t) and Economics (Rs)</li> </ul>	Agrono my     Ag. Ento     Soil Sci     Animal Sci. Sr. Sci. & Head

6.6	Horticultura l crops													
		Banana	<ul> <li>Low yield (22t/ha),</li> <li>Reduced bunch weight (10 Kg/bunc h),</li> <li>Poor filling of fingers, fruit cracking and micronut rient deficienc y</li> </ul>	Bunch care technologies to maximize yield in banana		-	IIHR, Bengalur u	Banana special Sulphate of potash Banana Bunch cover	6 kg 10 kg 250 no Total	960 1000 1050 3010/-	05	15050/-	• Days to harvest, Finger length and girth (cm), Weight of bunch (Kg), Yield (t/ha), B:C ratio	<ul> <li>Scientist (Horticu lture),</li> <li>Scientist (Plant protecti on)</li> </ul>
		Ginger	<ul> <li>Low yield (28t/ha)</li> <li>Poor crop growth</li> </ul>	Demonstrati on of bio capsules and Ginger special for enhancing yield in	Rio- de- Janeir o	-	IISR, Calicut	PGPR Bio capsule Trichoder ma Bio capsule Ginger special	08 No. 08 No. 02 kg	1200 1200 400	05	14000/-	• Plant height (cm), number of leaves per tiller, number of tillers per clump, yield (t/ha), incidence of rhizome rot	<ul> <li>Scientist (Horticu lture),</li> <li>Scientist (Plant protecti on),</li> </ul>

	• Rhizome rot disease incidence (30- 35%), reduced use efficienc y of fertilizers and micronut rient deficienc y	Ginger					Total	2800/-			(%), B:C ratio	• Scientist (Agrono my)
Tomato	<ul> <li>Incidence of Pinworm (60-70%)</li> <li>Low yield (30-35 t)</li> </ul>	Managemen t of Pinworm in tomato	_	_	NBAIR, Bengalur u	Sticky trap Water pan traps Lures Neem insecticide	10 Nos 10 Nos 30 Nos 1 ltr Total	500/- 700/- 1800/- 400/- 3400/-	05	17,000/	<ul> <li>Fruit damage (%)</li> <li>Fruit yield</li> <li>Economics</li> </ul>	<ul> <li>Ag. Ento</li> <li>Hort.</li> <li>Soil Sci</li> <li>Sr. Sci. &amp; Head</li> </ul>
Onion	<ul> <li>Incidence of Purple blotch disease (35-40%)</li> <li>Low yield</li> </ul>	Managemen t of purple blotch disease in onion	Ballar y red	-	UAS Dharwad	Psuedomo nas Traichoder ma Difenconaz ole 25 EC Boran	2 kg 1 kg 1 L 1 kg	300/- 130/- 2500/- 550/- 3480/-	05	17,400/	<ul> <li>Yield (t/ha)</li> <li>Disease severity</li> <li>Economics</li> </ul>	<ul> <li>Ag. Ento</li> <li>Hort.</li> <li>Soil Sci</li> <li>Sr. Sci. &amp; Head</li> </ul>
Chilli	<ul> <li>Improper soil and nutrient managem ent</li> <li>Nutrient</li> </ul>	Nutrient Managemen t in Chilli	-	-	UAS Dharwad	ZnSO4 FeSO4 WS mixture 19:19:19 Solubor KNO3	10 kg 10 kg 2 kg 2 kg 2 kg	650 750 280 220 240	10	21400/-	<ul> <li>Nutrient status of Soil : Initial and after harvest</li> <li>No. of fruits / plant, Pest and</li> </ul>	<ul> <li>Soil Science</li> <li>Ag, Ento,</li> <li>Horticu lture</li> </ul>

			deficienc ies (P, K, Zn, Fe and B)						Total	2140/-			Disease incidence (%), Yield (q/ha) and Economics (Rs)	• Sr. Sci. & Head
		Mango	<ul> <li>Incidence of leaf hopper (25-30%) and powdery mildew 15-20% and fruit fly (25- 30%)</li> <li>low fruit yield (15-20%)</li> </ul>	Integrated Crop management in Mango	-	-	IIIHR Bengalore	Hexaconaz ole, Mango special Thiamethox am 25 % WG Planofix 4.5 % (w/w) Fruit fly traps	1 L 8 kg 500 g 200 ml 15 no Total	450/- 1200/- 1000/- 200/- 2250/- 5100/-	05	25,500/	<ul> <li>No of fruits / plant</li> <li>Leaf hopper and fruitfly incidence (%)</li> <li>Powdery mildew incidence(%)</li> <li>Fruit yield(q/ha)</li> <li>Economics (Rs)</li> </ul>	• Ag. Ento • Hort. • Soil Sci Sr. Sci. & Head
6.7	Livestock	Fodder crops	Scarcity of green fodder Low milk yield and poor quality milk	Demonstrati on of mixed perennial fodder crops	-	-	TNAU	Multicut Sorghum (COFS-31) seeds Hedge Lucerne seeds Sesbania grandiflora seeds	1.5 kg 2 kg 250 g Total	1200 1600 200 3000/-	05	15,000/	• Fodder Yield (t/ha), Milk yield (lit/lac) and Economics	<ul> <li>Scientist (Animal Science)</li> <li>Scientist (Agrono my)</li> <li>Sr Sci &amp; Head</li> </ul>
		Milk production	<ul> <li>High incidence of mastitis</li> <li>High antimicro bial resistanc</li> </ul>	Demonstrati on of clean milk production	-	-	KVAFS U, Bidar	CMT kit Teat dipping solution Dip cups Tri- Sodium Citrate	1 No. 1000 ml 1 No. 200g	600 600 300 400	10	25000/-	<ul> <li>Incidence of subclinical and clinical mastitis (%)</li> <li>SNF and Fat (%)</li> <li>Milk production (Lit/Lactation)</li> <li>Economics (Rs)</li> </ul>	<ul> <li>Scientist (Ani Sci)</li> <li>Sr. Sci. &amp; Head</li> </ul>

			<ul> <li>e</li> <li>Reduced milk productio n</li> <li>Mastitis incidence : 35%</li> </ul>					Intra- mammary infusion	4 Nos Total	600 2500/-				
6.8	Fisheries	Farm ponds	<ul> <li>Poor growth for existing common carp</li> <li>Low yield due to early breeding</li> </ul>	Demonstrati on of Amur fish farming in Farm ponds	-	-	KVAFS U, Bidar	Catla Rohu Amur carp Floating Feed	600 no 300 no 600 no 80kg Total	600 300 2400 3000 6300/-	05	31500/-	<ul> <li>Yield (Kg/ha)</li> <li>Body weight (g)</li> <li>length (cm)</li> <li>Economics</li> </ul>	<ul> <li>Scientist (Ani Sci)</li> <li>Sr. Sci. &amp; Head</li> </ul>
6.9	Others													
0.7		Nutrition garden						Vegetable seed Kit Curry leaf plant Drumstick seedlings Lime seedlings Sapota plant	01 02 02 01 01	100 40 20 20 50	25	17875/-	<ul> <li>Quantity of vegetables</li> <li>Produced (kg)</li> <li>Economics</li> </ul>	<ul> <li>Horticul ture,</li> <li>SS&amp;AC</li> <li>Agrono my,</li> <li>Sr. Scientist &amp; Head</li> </ul>
		Nutri						Trichoderm a Neem Oil	500 gram 500 ml Total	65 400 715/-				

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

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	Millet	FLD	Millet production technology	01	30	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Maize	FLD	ICM in maize	02	60	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Green gram	OFT	ICM in Greengram	01	30	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Redgram	FLD	ICM in Redgram	02	60	<ul> <li>Sr Sci &amp; Head</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> </ul>
		Groundnut	FLD	ICM in Ground nut	02	60	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Soybean	FLD	ICM in Soybean	02	60	<ul> <li>Ag. Ento</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Sugarcane	FLD	ICM in Sugarcane	02	60	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
7.2	Horticulture production	ICM in Ginger	FLD	Integrated crop management in Ginger	02	60	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>

		ICM in Banana	FLD	Integrated crop management in banana	02	60	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
		IPDM in Garlic	-	Plant protection in Garlic	02	00	<ul> <li>Prog. Asst.</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Onion	FLD	Plant protection in onion	02	60	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Tomato	FLD	Plant protection in Tomato	02	60	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
7.3	Livestock production	Poultry	FLD	Backyard poultry rearing	1	30	Animal Scientist and All other scientist
		Fodder	FLD	Fodder crops and fodder trees	1	30	Animal Scientist and All other scientist
		Dairy animals	FLD	Clean milk production	1	30	Animal Scientist and All other scientist
7.4	Horticulture production	-	-	-	-	-	-
		Mango	OFT	Post harvest management in Mango	01	30	<ul> <li>Scientist Horticulture</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
7.5	Plant protection	Guava	OFT	Pest and disease management in Guava	02	60	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Chilli	-	Management of Leaf curl	01	30	• Ag. Ento

		Cotton Maize	-	Complex IPM in Cotton IPM in Maize	01	30	<ul> <li>Scientist Horticulture</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> <li>Ag. Ento</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> <li>Ag. Ento</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
7.6	Production of inputs at site	-	-	-	-	-	-
7.7	Soil health and fertility	Maize	FLD	ICM in Maize	02	60	<ul> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Agronomy</li> <li>Animal Science</li> <li>Sr Sci &amp; Head</li> </ul>
		Bengalgram	FLD	ICM in Bengalgram	03	90	<ul> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
		Banana	FLD	Nutrient management	01	30	<ul> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
		Chilli	OFT	Nutrient management	01	30	<ul> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
		Cabbage	OFT	Organic management of nutrients	02	60	<ul> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
		Fertilizers	-	Fertilizer application awareness	02	60	Soil Scientist

		Climate	-	to farmers Suitability of Crops to changed climatic situations	02	60	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Animal Scientist</li> <li>Sr Sci &amp; Head</li> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Animal Scientist</li> <li>Sr Sci &amp; Head</li> </ul>
7.8	PHT and value addition	-	-	-	-	-	-
7.9	Capacity building/ group dynamics	Propagation techniques in horticulture crops	-	Fruit crops	01	30	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
7.10	Farm mechanization	-	-	-	-	-	-
7.11	Fisheries production technologies	Fish Production	FLD	Composite Fish Farming	01	30	• Animal Scientist and All other scientist
7.12	Mushroom production	-	-	-	-	-	-
7.13	Agro forestry	-	-	-	-	-	-
7.14	Bee keeping	Bee keeping	-	Bee keeping	01	30	<ul> <li>Ag. Ento</li> <li>Harticulture</li> <li>Agronomy</li> <li>Prog. Asst.</li> <li>Sr Sci &amp; Head</li> </ul>
7.15	Sericulture	-	-	-	-	-	-
7.16	Others, pl. specify	Nutri garden	FLD	Nutri garden	02	60	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>

## 8. Training for rural youth during 2021-22

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	Seed production	Skill development	Seed production technology in field crops and vegetable crops	01	30	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Ag. Ento</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
8.2	Horticulture production	Vegetable	Skill development	Crossing techniques in vegetables	01	30	<ul><li>Horticulture</li><li>Agronomy</li><li>Sr Sci &amp; Head</li></ul>
		Nursery	Skill development	Nursery management	01	30	<ul><li>Horticulture</li><li>Sr Sci &amp; Head</li></ul>
8.3	Livestock production	Sheep and goat	Skill development	Scientific sheep and goats farming	01	30	• Animal Scientist and All other scientist
		Dairy farming	Skill development	Scientific dairy farming	01	30	• Animal Scientist and All other scientist
		Backyard Poultry	Skill development	Role of backyard poultry in enhancing the food and nutrition security.	01	30	• Animal Scientist and All other scientist
8.4	Home Science	-	-	-	-	-	-
8.5	Plant protection	-	-	-	-	-	-
		Nursery	Skill development	Soil and Nutrient management in nursery of forest plants	02	60	<ul> <li>Soil Science</li> <li>Horticulture</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
8.6	Production of inputs at site	Seed production	Skill development	Seed production technology in field crops and vegetable crops	01	30	<ul> <li>Horticulture</li> <li>Soil Science</li> <li>Ag. Ento</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
		Vermicomposting	Skill development	Vermicomposting Technology	01	30	<ul><li>Agronomy</li><li>Ag. Entomology</li><li>Horticulture</li></ul>

							<ul><li>Soil Science</li><li>Sr Sci &amp; Head</li></ul>
8.7	Soil health and fertility	Organic farming	Skill development	Organic farming	01	30	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Soil testing	Soil sampling	Soil testing	04	80	<ul> <li>Soil Science</li> <li>Agronomy</li> <li>Horticulture</li> <li>Sr Sci &amp; Head</li> </ul>
8.8	PHT and value addition	-	-	-	-	-	-
8.9	Capacity building/ group dynamics	Vermicompost	Skill development	Production of Vermicompost	01	30	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Seed production	Skill development	Seed production technology in field crops and vegetable crops	01	30	<ul> <li>Soil scientist</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
8.10	Farm mechanization	Millets	FLD	PHT and value addition	02	60	<ul> <li>Agronomy</li> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
8.11	Fisheries production technologies	Fisheries	Skill development	Composite Fish cultivation	01	30	• Animal Scientist and All other scientist
8.12	Mushroom production	Production technologies of Mushroom	Skill development	Mushroom	01	30	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento Sr Sci &amp; Head</li> </ul>
8.13	Agro forestry	Vermicompost	EDP	Organic farming	01	30	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Sheep and goat	Skill development	Health and Disease management in sheep and goats	01	30	• Animal Scientist and All other scientist

							•
8.14	Bee keeping	Bee Keeping	Skill development	Apiculture	01	30	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
8.15	Sericulture	Mulberry	-	IPM in Mulberry	02	60	<ul> <li>Prog. Asst.</li> <li>Ag. Ento</li> <li>Soil Scientist</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
8.16	Others, pl. specify	Millets	FLD	PHT and value addition	02	60	<ul> <li>Agronomy</li> <li>Soil Scientist</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>

## 9. Training for extension personnel during 2021-22

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 in <i>Kharif</i> crops	01	30	<ul> <li>Ag. Entomology</li> <li>Agronomy</li> <li>Horticulture</li> <li>Soil Science</li> <li>Sr Sci &amp; Head</li> </ul>
		ICM in <i>Rabi</i> crops	01	30	<ul> <li>Agronomy</li> <li>Ag. Entomology</li> <li>Horticulture</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Soil fertility assessment and nutrients management	03	90	<ul> <li>Soil Science</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
		Millets	02	60	Soil Science

					Agronomy
				100	• Sr Sci & Head
		Fertilizer application awareness	02	100	Soil Science
					• Agronomy
					• Ag. Ento
					Horticulture
					• Sr Sci & Head
		Soil testing	02	50	Soil Science
					<ul> <li>Agronomy</li> </ul>
					Horticulture
					• Sr Sci & Head
9.2	Home Science	-	-	-	-
		Kitchen and terrace garden	02	40	Horticulture
					Soil Science
					Agronomy
					• Ag. Ento
					• Sr Sci & Head
9.3	Capacity building and	Improved cultivation practices in <i>kharif</i>	01	30	Agronomy
	group dynamics	crops			• Ag. Entomology
	group dynamics				• Horticulture
					• Soil scientist
					• Sr Sci & Head -
		IPM in different crops	01	30	• Ag. Entomology
					Agronomy
					Horticulture
					• Soil scientist
					• Sr Sci & Head
9.4	Horticulture	Recent advances in Horticulture crop	01	30	Horticulture
2.1	Horticulture	production	01	20	Soil scientist
		production			• Sr Sci & Head
9.5	Livestock production and	New emerging diseases –	01	30	Animal Scientist and
7.5	_	preparedness and control	01	50	All other scientist
	management	preparedness and control			
9.6	Plant protection	Plant protection in <i>Kharif</i> crops	01	30	• Ag. Entomology
					Agronomy
					Horticulture
					• Soil scientist
					• Sr Sci & Head
		ICM in <i>Kharif</i> crops	01	30	• Ag. Entomology

					<ul> <li>Agronomy</li> <li>Harticulture</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
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	Bamboo production technology	01	30	<ul><li>Horticulture</li><li>Soil scientist</li><li>Sr Sci &amp; Head</li></ul>
		To upgrading ICT platform in agriculture	01	30	<ul><li>Technical Officer (Computer)</li><li>All Scientists</li></ul>

# 10. Vocational trainings during 2021-22

Sl.No.	Thematic area and the crop/ enterprise	Training title	No. of programmes	Duration (days)	Expected No. of participants	Sponsoring agency, if any	Names of the team members involved
10.1	Crop production	Vermicomposting	04	01	100	-	<ul> <li>Soil Science</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Animal Sciences</li> <li>Sr Sci &amp; Head</li> </ul>
		Bee – Keeping	02	01	50	-	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Soil Science</li> <li>Animal Sciences</li> <li>Sr Sci &amp; Head</li> </ul>
10.2	Home Science	-	-	-	-	-	-
10.3	Capacity building and group Dynamics	Strengthening of FPO Activities by integrated approach	04	01	100	-	<ul><li>Soil Science</li><li>Ag. Ento</li><li>Horticulture</li><li>Agronomy</li></ul>

							<ul><li>Animal Sciences</li><li>Sr Sci &amp; Head</li></ul>
10.4	Horticulture	Protected cultivation in vegetable crops	02	01	40	Dept. of Horti.	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
		Post harvest management in Mango	02	01	40	NABARD.	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
10.5	Livestock production and management	Modern Dairy Farming	01	01	30	-	• Animal Scientist and All other scientist
		Sheep and goat feeding and Health management	01	01	30	-	• Animal Scientist and All other scientist
10.6	Plant protection	Pest management in horticulture crops	01	01	30	-	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Sr Sci &amp; Head</li> </ul>
10.7	Farm mechanization	-	-	-	-	-	-
10.8	PHT and value addition	Processing and value addition in Horticulture crops	02 (3 days duration)	Students & youth	60	-	<ul><li>Horticulture</li><li>Sr Sci &amp; Head</li></ul>
10.9	Production of inputs at site	-	-	-	-	-	-
10.10	Sericulture	-	-	-	-	-	-
10.11	Fisheries	Fishery farming	01	01	30	-	• Animal Scientist and All other scientist
10.14	Other, pl. specify	-	-	-	-	-	-
	ICT in agriculture	Hands on training to upgrading the knowledge of ICT in agriculture	2	2	100	-	<ul> <li>Technical Officer (Computer)</li> <li>All Scientists</li> </ul>

## **11. Sponsored trainings during 2021-22**

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 technologies in <i>kharif &amp; Rabi</i> crops	02	01	60	KSDA	<ul> <li>Agronomy</li> <li>Ag. Ento</li> <li>Horticulture</li> <li>Soil scientist</li> <li>Sr Sci &amp; Head</li> </ul>
		Importance of Soil fertility and soil testing	02	01	60	KSDA	<ul> <li>Soil scientist</li> <li>Agronomy</li> <li>Horticulture</li> <li>Sr Sci &amp; Head</li> </ul>
11.2	Home Science	-	-	-	-	-	-
11.3	Capacity building and group Dynamics	-	-	-	-	-	-
11.4	Horticulture	Kitchen and terrace garden	02	02	30	DOH	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
		ICM in Mango	02	03	40	DOH	<ul> <li>Horticulture</li> <li>Soil scientist</li> <li>Agronomy</li> <li>Ag. Ento</li> <li>Sr Sci &amp; Head</li> </ul>
11.5	Livestock production and management	Modern dairying and clean milk production	01	01	30	KMF/ATMA	• Animal Scientist and Sr S and Head
11.6	Plant protection	Pest and disease management in different field crops	01	01	30	KSDA	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Soil scientist</li> </ul>
		Pest and disease management in different Horticulture crops	01	01	30	DOH	<ul> <li>Ag. Ento</li> <li>Horticulture</li> <li>Agronomy</li> <li>Soil scientist</li> </ul>

28

							• Sr Sci & Head
11.7	Farm mechanization	-	-	-	-	-	-
11.8	PHT and value addition	-	-	-	-	-	-
11.9	Production of inputs at site	-	-	-	-	-	-
11.10	Sericulture	-	-	-	-	-	-
11.11	Fisheries	Composite fish farming	01	01	30	DOF / ATMA	• Animal Scientist and Sr S and Head
11.12	Others, pl. specify	-	-	-	-	-	-

## 12. Extension activities during 2021-22

Sl.No.	Extension activity	No. of activities	Targeted numberof participants	Names of the team members involved
12.1	Advisory services	600	3500	KVK Team
12.2	Diagnostic visits	25	250	KVK Team
12.3	Field days	15	500	KVK Team
12.4	Group discussions	15	200	KVK Team
12.5	Kisan gosthies	01	50	KVK Team
12.6	Film shows	06	300	KVK Team
12.7	Self -Help Groups (SHGs) meetings	02	60	KVK Team
12.8	Kisan Melas	01	60	KVK Team
12.9	Exhibitions	03	600	KVK Team
12.10	Scientists' visit to farmers fields	75	250	KVK Team
12.11	Plant/soil health/animal health camps	05	150	KVK Team
12.12	Farm science club meetings	-	-	-
12.13	Ex-trainees sammelans (Meetings)	01	30	KVK Team
12.14	Farmers' seminars/workshops	01	50	KVK Team
12.15	Method demonstrations	10	200	KVK Team
12.16	Celebration of important days	08	300	KVK Team
12.17	Special day celebrations	02	200	KVK Team
12.18	Exposure visits	01	25	KVK Team

12.19	Technology week celebration	01	200	KVK Team
12.20	Farmers Field School (FFS)	-	-	-
12.21	Farm innovators meet	-	-	-
12.22	Awareness programmes	05	150	KVK Team
12.23	Pre-kharif campaign	03	150	KVK Team
12.24	Pre-rabi/summer campaign	02	100	KVK Team
12.25	Others, pl. specify	-	-	-

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

#### 13.1 Technological knowledge

Sl. No.	Category	Details of technologies	Area (ha)	Number	Names of the team members involved
13.1.1		Millet crop cafeteria	1.0	-	• Tech Officer (Farm) & Senior Scientist & Head
		Fodder crop(grasses) cafeteria	1.0	-	• Tech Officer (Farm) & Senior Scientist & Head
		Sapota garden	2.0	-	• Horticulture, Tech Officer (Farm), Sr. Scientist
	Technology park/ crop cafeteria	Multiple cropping system (Sapota+Millets+Fodder crops)	2.0	-	• Tech Officer (Farm) & Senior Scientist & Head
		Drumstick unit (PKM-1)	0.5	-	• Tech Officer (Farm) & Senior Scientist & Head
		Horticulture Nursery Unit	0.20	-	• Horticulturist, Tech Officer (Farm) & Senior Scientist & Head
		Horticulture mother plant orchard	1.0	-	• Horticulturist, Tech Officer (Farm) & Senior Scientist & Head
13.1.2		Azolla unit	-	01	• Animal Scientist, Tech Officer (Farm) & Senior Scientist & Head
	Demonstration units	Dairy unit	-	01	• Animal Scientist, Tech Officer (Farm) & Senior Scientist & Head
	Demonstration units	Poultry rearing unit	-	01	• Animal Scientist, Tech Officer (Farm) & Senior Scientist & Head
		Apiculture	-	01	• Entomologist, Tech Officer (Farm) & Senior Scientist & Head

		Sheep rearing unit	-	20 No's	Animal Scientist, Tech Officer (Farm)     & Senior Scientist & Head
13.1.3	Lab analytical services	-	-	-	-
13.1.4		IFS, ICM, Organic Farming	-		
		Soil and water conservation	-		
	Technology week	Plant protection	-	01	KVK Team
		Bio control agents	-		
		Processing and value addition	-		
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 2021-22 (q)	Number planned to be produced during 2021-22	Names of the team members involved
13.2.1			Foxtail millet (Dhft-109- 3)	20	-	Tech Officer (Farm) & Senior Scientist & Head
			Little millet (Dhlm-36-3)	10	-	Tech Officer (Farm) & Senior Scientist & Head
	SeedsSeed Unit UAS, DharwadProso millet (DHPM-2769)05SeedsSeed Unit UAS, DharwadBarnyard millet (DHBM-93-2)20Finger millet (DHFM-78-3)05Redgram (BSMR-736)25	Seed Unit UAS, Dharwad		05	-	Tech Officer (Farm) & Senior Scientist & Head
			•	20	-	Tech Officer (Farm) & Senior Scientist & Head
		05	-	Tech Officer (Farm) & Senior Scientist & Head		
			-	25	-	Tech Officer (Farm) & Senior Scientist & Head
			CoFS-31	1.0		Tech Officer (Farm),

						scientist (Vet) & Senior Scientist & Head
			Castor (GC-3)	05	-	Tech Officer (Farm) & Senior Scientist & Head
			Sun hemp (Local)	25	-	Tech Officer (Farm) & Senior Scientist & Head
			Horsgram (GPM-6)	05	-	Tech Officer (Farm) & Senior Scientist & Head
			Rabi Sorghum (SPV-2217)	15	-	Tech Officer (Farm) & Senior Scientist & Head
13.2.2			Drumstick	-	10000	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
			Sapota (DHS- 1)	-	500	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
	Planting material		Sapota (DHS- 2)	-	500	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
			Curry leaf (Suvasini)	-	2000	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
			Tamarind (DTS-1)	-	1000	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
			Lime (Kazgi)	-	1000	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
			Guava (L-49)	-	1000	Scientist (Horticulture), Tech Officer (Farm) & Senior Scientist & Head
13.2.3			Trichoderma	10 qtl	-	Entomologist, Prog. Asst & Senior Scientist & Head
	Bio-products	UAS Dharwad	PSB	4.0	-	Entomologist , Programme assistant , Senior scientist and head
13.2.4	Livestock strains					

			Calf-HFCB	-	06	Animal Scientist
			Lamb-Deccani	-	06	Animal Scientist
13.2.5	Fish fingerlings	-	-	-	-	-
13.2.6	Any other, pl specify		Vermicompost		25	Tech Officer (Farm) and Senior Scientist & Head

## 13.3 Technological information

Sl. No	Category	Technological capsules/lectures/number	Names of the team members involved
13.3.1	Technology backstopping to line departments		
	a. Agriculture		
	b. Horticulture	Vegetable crop management (02)	Scientist (Horticulture)
	c. Animal Husbandry	Disease management (02)	Scientist (Animal Scientist)
	d. Fisheries	-	-
	e. Agricultural Engineering	-	-
	f. Sericulture	-	-
	g. Others, pl. specify	-	-
13.3.2	Literature/publication	03	Scientist (Animal Scientist)
13.3.3	Electronic media	<ul> <li>Design and development of KVK website</li> <li>Database for KVK activities</li> <li>Documentation of daily routine activities in KVK Portal, KVK Website and Social Media (Facebook, WhatsApp)</li> <li>Updating the MPR, AE MPR and daily events</li> <li>Organise online training programme</li> <li>Demonstration and popularization of agril websites and mobile apps to farmers</li> </ul>	<ul> <li>Technical Officer (Computer)</li> <li>All Scientists</li> </ul>
13.3.4	Kisan mobile advisory services	40 massages to 39000 farmers	<ul><li>Technical Officer (Computer)</li><li>All Scientists</li></ul>
13.3.5	Information on contractate and an allowed by the	KAPC (DFI)	All scientist
	Information on centre/state sector schemes and service	KSDH (FPO)	All scientist
	providers in the district (Data may be collected from different agencies).	KSDA	All scientist
		NABARD	All scientist

## 14. Additional activities planned during 2021-22

Sl.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	DFI	DFI in Choudadanapur Village	Recommended practices for cultivation of field crops and vegetable crops and animal health management	1,00,000/-	KVK team
2	Paramparagatha Krishi Vikasa Yojane (PKVY)	Organic management practices	Green manuring, Jeevamrutha application, Vermicompost application, Beejamrutha treatment, Land convection into organic	3,00,000/-	KVK team
3	Cashew				

# 15. Revolving fund

#### 15.1Financial status of revolving fund

Opening balance as on 01.04.2020 (Rs.in Lakh)	Expenditure incurred during 2020-21 (Rs.in Lakh) Upto 31.01.2021	Receipts during 2020-21 (Rs.in Lakh)	Closing balance as on 31.01.2021 (Rs.in Lakh)	Expected closing balance by 31.03.2021(Including value of material in stock/ likely to be produced)
6.23	13.32	12.20	7.37	

## 15.2 Plan of activities under revolving fund

Sl.No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
15.2.1	Dairy (Milk production)	15,000 (Liter)	4,50,000/-	Scientist Animal Scientist, Tech Officer (Farm) & Senior
				Scientist & Head
15.2.2	Sheep Lamb production	08	50,000/-	Scientist Animal Scientist, Tech Officer (Farm) & Senior
				Scientist & Head
15.2.3	Seeds production (q)	100	4,50,000/-	Tech Officer (Farm) & Senior Scientist & Head
15.2.4	Production of planting	16000 (No)	3,00,000/-	Scientist (Horticulture), Tech Officer (Farm) & Senior
	materials (Nos.)			Scientist & Head
15.2.5	Production of Vermicompost	50	30000/-	Tech Officer (Farm) & Senior Scientist & Head
	(q)			
15.2.6	Trichoderma (q)	15	1,50,000/-	Scientist (Entomology) , Prog. Asst & Senior Scientist &

				Head
15.2.7	Soil and Water (No.s)	4000	3,50,000/-	Scientist (Soil Science), Prog. Asst & Senior Scientist &
				Head
		Total	17,80,000/-	

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

Sl.No.	Type of samples	No.of samples to be analyzed	Names of the team members involved
16.1	Soil test using analytical lab	2500	Soil scientist, Programme assistant (Lab), Senior scientist and head
16.2	Soil test using mobile analysis kit	-	-
16.3	Water	1500	Soil scientist, Programme assistant (Lab), Senior scientist and head
16.4	Plant	-	Soil scientist, Programme assistant (Lab), Senior scientist and head
16.5	Others, pl. specify		

#### 17. E-linkage during 2021-22

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		
17.2	Creation and maintenance of relevant database system for KVK		
	• Training database	Going on	-
	Seeds & planting material	Going on	-
	• Soil & water test database	Going on	-
	• FLD	Going on	-
	• Milk sold	Going on	-
	Farmers Visit KVK	Going on	-
	• OFT	Going on	-
	• Extension activities	Going on	-
	Publication (Retrench Paper, Abstract, Popular article, Folder etc.,)	Going on	-
	ICAR revolving fund	Going on	-
17.3	Any other (Please specify)	-	-

#### 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
18.1	Maintenance of fodder demonstration bank	Napier gross, perennial fodder crops
18.2	Maintenance of Nursery garden for multiplication of Horticultural plants	Sapota, tamarind, Curry leaf, Sugarcane, Guava

18.3	Training cum demonstration on Rainwater harvesting and its utilization	-
18.4	Maintenance of Nutrition garden	-

## 19. Farmers Field School (FFS) planned

Thematic area	Title of the FFS	Budget proposed in Rs.
ICM	Improved production Technologies for Mango	30000
ICM	Intigrated Crop Managament in Bt Cotton	30000

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

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

## 21.Details of budget utilization (2020-21) upto 31st March 2021

	a budget utilization (2020-21) upto 51 <sup>m</sup> Waren 2021			( <b>Rs.</b> )
Sl.No.	Particulars	Sanctioned	Released	Expenditure
21.1	(A). REVENUE (Recurring Contingencies)			
21.1.1	Pay & Allowances	18426000	18426000	16210865
21.1.2	Traveling allowances	150000	150000	118694
21.1.3	Contingencies	0	0	0
21.1.3. <i>a</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	250000	250000	249697
21.1.3. <i>b</i>	POL, repair of vehicles, tractor and equipments	240000	240000	239439
21.1.3. <i>c</i>	Food/refreshment for farmers/extension personnel @ Rs.150/person/day	90000	90000	88450
21.1.3. <i>d</i>	Training material (need based materials and equipments for conducting the training)	68000	68000	67252
21.1.3.e	Frontline demonstrations	275000	275000	274370
21.1.3.f	On farm testing (OFTs)/Technology Assessment	72000	72000	71973
21.1.3.g	Integrated Farming System (IFS) (Min. 5 Units)	0	0	0
21.1.3.h	Training of extension functionaries	25000	25000	23900
21.1.3. <i>i</i>	Extension activities/services	60000	60000	58291
21.1.3.j	Farmers' Field School	0	0	0
21.1.3.k	Nutrigarden	25000	25000	24925
21.1.3 <i>.l</i>	Soil & water testing & issue of soil health cards	25000	25000	24854
21.1.3 <i>.m</i>	Maintenance of building	50000	50000	50000
21.1.3. <i>n</i>	Farmers Conclave, KVK Conference	0	0	0
21.1.3.0	Video production	0	0	0
21.1.3.p	Library (Purchase of Journals, Periodicals, News Papers & Magazines)	20000	20000	12800
	Total Recurring	19776000	19776000	17515510
21.2	(B). CAPITAL (Non-Recurring Contingencies)			
21.2.1	Equipments& Furniture	243000	243000	241714
21.2.2	Works	0	0	0
21.2.3	Vehicle	0	0	0
21.2.3 a	Four wheeler (replacement)	0	0	0
21.2.4	Library	0	0	0
	Total Non Recurring	243000	243000	241714
21.3	(C). REVOLVING FUND	0	0	0
	GRAND TOTAL (A+B+C)	20019000	20019000	17757224

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

Sl.No.	Particulars	BE 2021-22 proposed (Rs. In lakhs)
22.1	(A). REVENUE (Recurring Contingencies)	
21.1.1	Pay & Allowances	156.00
	Traveling allowances	3.00
22.1.3	Contingencies	18.75
22.1.3.a	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	2.75
22.1.3.b	POL, repair of vehicles, tractor and equipments	2.00
22.1.3.c	Food/refreshment for farmers / extension personnel @ Rs.150/person/day	1.25
	Training material (need based materials and equipments for conducting the training)	1.50
22.1.3.e	Frontline demonstrations	4.00
22.1.3.f	On farm testing (OFTs)/Technology Assessment	1.25
22.1.3.g	Integrated Farming System (IFS) (Min. 5 Units)	-
	Training of extension functionaries	0.50
	Extension activities/services	0.75
22.1.3.j	Farmers' Field School	0.30
	EDP (2 Nos.) / innovative activities	0.30
	Soil &water testing & issue of soil health cards	0.35
22.1.3.m	Maintenance of building	3.00
	Nutrigardens – 30 demonstrations	0.25
	Video Production	0.25
22.1.3. <i>n</i>	Library (Purchase of Journals, Periodicals, News Papers & Magazines)	0.20
22.1.3.0	Others, pl. specify	0.20
	Total Recurring (A)	177.75
22.2	(B). CAPITAL (Non-Recurring Contingencies)	
22.2.1	Equipments& Furniture	5.00
22.2.2	Works	10.00
22.2.3	Vehicle	_
22.2.3.a	Four wheeler (replacement)	_
22.2.4	Library	
	Total Non Recurring (B)	15.00
	Grand Total (A + B)	192.75