ICAR-KRISHI VIGYAN KENDRA, GADAG

ANNUAL REPORT –2024

(FOR THE PERIOD FROM 01 JANUARY, 2024 TO 31 DECEMBER 2024)

ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti
Gadag district, Karnataka State
Pincode: 582205
Website: https://kvkgadag.icar.gov.in/ E-mail: kvk.Gadag@icar.gov.in
Host Organisation: Agricultural Science Foundation, Hulkoti

PART I - GENERALINFORMATION ABOUT THE KVK

1.1. Name and address of KVK withphone, fax and e-mail

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, Gadag dist.	(08372) 289325	-	kvk.Gadag@icar.gov.in kvkhulkoti@gmail.com	www.kvkgadag.icar.gov.in

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Agricultural Science Foundation, Hulkoti Gadag dist.	(08372) 289325	-	hulkotiasf@gmail.com	www.asf.ind.in

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Sudha V. Mankani	-	9480552339	sudhavmankani@gmail.com

1.4. Year of sanction: 1985

1.5. Staff position as on 31 December2024

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M / F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Level	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Head/Senior Scientist	VACANT	Senior Scientist and Head								
2	Scientist/ SMS	Dr. Sudha V. Mankani	Senior Scientist and Head(I/c) Subject Matter Specialist	F	Home Science	M.H.Sc, PhD	L-12	126600	26.06.1995	P	OBC
3	Scientist/ SMS	Mr. N.H. Bhandi	Subject Matter Specialist	M	Soil Science	M.Sc (Agri)	L-11	101100	01.06.2005	P	OBC
4	Scientist/ SMS	Mrs. Hemavati R.H.	Subject Matter Specialist	F	Horticulture	M.Sc (Horti)	L-10	63100	14.02.2020	P	OBC
5	Scientist/ SMS	Dr. Vinayak Niranjan	Subject Matter Specialist	M	Ag. Engineering	M.Tech (Ag.Eng), PhD	L-10	61300	11.10.2021	P	OBC
6	Scientist/ SMS	VACANT	Subject Matter Specialist		Agronomy						
7	Scientist/ SMS	VACANT	Subject Matter Specialist		Ag. Extension						

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M / F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Level	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
8	Programme Assistant (Lab Tech.)	Dr. B.M. Murgod	Programme Assistant	M	Animal Science	B.V. Sc	L-7	64100	25.06.2007	P	OBC
9	Programme Assistant (Computer)	Mrs. Lalita S.Asuti	Computer Programmer	F	-	M.Sc (IT)	L-7	70000	01.06.2005	P	OBC
10	Programme Assistant/ Farm Manager	Mr. Suresh L. Halemani	Farm Manager	M	-	B.Sc (Agri.)	L-7	56900	01.02.2011	P	OBC
11	Assistant	Mr. M.B. Jakkanagoudra	Assistant	M	-	M.Com	L-7	64100	25.06.2007	P	OBC
12	Jr. Stenographer	Mr. T.K. Sai Swaroop Rao	Jr. Stenographer	M	-	SSC & Certificate in Stenography	L-4	32300	15.12.2016	P	OBC
13	Driver - 2	Mr. G.D. Madivalar	Driver-Cum-Mechanic	M	-	7th Std.	L-4	43500	26.06.1995	P	OBC
14	Driver - 1	VACANT	Driver-Cum-Mechanic								
15	SS-2	Mrs. Savita V. Karadani	Field Assistant	F	-	PUC	L-1	20300	14.02.2020	P	OBC
16	SS-1	VACANT	Field Assistant								

1.6. Total land with KVK (in ha):28.0 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.9
2.	Under Demonstration Units	0.5
3.	Under Crops	12.0
4.	Orchard/Agro-forestry	13.6
5.	Others	-

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs. in lakhs)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	1996	800	33.46	-	-	-
2.	Farmers Hostel	ICAR	1997	550	17.26	-	-	-
3.	Staff Quarters	ICAR	31-03-2006	400	25.82	-	-	-
	1							
	2							
	3							
	4							
	5							
	6							
4.	Demonstration Units							
	1. Dairy	ICAR	31-03-1997	50	4.00	-	-	-
	2. Sheep & goat	ICAR	31-03-1997	50	2.63	-	-	-
	3. Organic input production unit	ICAR	31-03-2011	67	3.00			
5	Fencing	ICAR	31-03-2011		8.00			
6	Rain Water harvesting system	ICAR	31-03-2007	-	10.00	-	-	-
7	Threshing floor	ICAR	31-03-2011	278	2.00	-	-	-
8	Farm godown	ICAR	31-03-2011	70	3.00	-	-	-
9	Vermi Compost	DDB	31-03-2002	100	3.50	-	-	-
10	Vehicle & implement shed	ICAR	31-03-2011	80	3.00	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs. in lakhs)	Total kms. Run	Present status
Jeep (Mahindra Bolero)	2023	9.00	18064	Good
Tractor	2003	5.00	15073Hrs	Needs replacement
Motor cycle - I	2004	0.40	80932	Needs replacement
Motor cycle - II	2009	0.50	64607	Needs replacement

C) Lab Equipment & AV aids

Name of the equipment	Year of purchase	Quantity (No.)	Cost (Rs. in lakhs)	Present status
Computer	2008	1	1.00	Good
Digital Amplifier with Public Address System	2013	1	0.36	Good
OHP	2004	1	0.25	Good
Motorised projection screen	2013	1	0.21	Good
White board	2013	1	0.14	Good
LED display board	2013	1	0.10	Good
Lap top Computer	2007	1	0.53	Not Good

Name of the equipment	Year of purchase	Quantity (No.)	Cost (Rs. in lakhs)	Present status
LCD	2007	1	0.45	Good
Ceramic black board	2007	1	0.12	Good
Lab equipments for dairy and goatery	2011	1	0.50	Good
Generator	2011	1	1.00	Good
EPBAX system	2011	1	0.50	Good
Equipments of Plant health diagnostic unit	2011	1	10.00	Good
Laptop computer	2016-17	1	0.589	Good
Desktop computer	2016-17	1	0.25	Good
Printer	2016-17	1	0.181	Good
Copier	2016-17	1	0.595	Good
Projector	2016-17	1	0.48	Good
Digital camera	2016-17	1	0.242	Good
Pico projector	2016-17	1	0.145	Good
Amplifier	2016-17	1	0.055	Good
Class room chairs	2016-17	1	0.21	Good
File cabin	2016-17	1	0.20	Good
Hostel furniture	2016-17	1	0.59	Good
Projector Screen	2020-21	1	0.24	Good
Laptop	2020-21	1	0.79	Good
Desktop	2020-21	1	0.44	Good
Office furniture	2020-21	1	1.02	Good
Desktop (All in one)	2022	1	1.26	Good
Laptop	2022	1	0.62	Good
Printer (All in one)	2022	1	0.30	Good

D)Farm equipment and implements

Name of the equipment/implement	Year of purchase	Quantity (No.)	Cost (Rs.)	Present status
Hipro lab model gin machine	2006	1	0.70	Good
Seed delinting machine	2006	1	0.18	Good
Cotton seed sorter	2007	1	0.50	Good
Seed treatment drum	2007	1	0.40	Good
Rotary weeder	2009	1	0.84	Good
Laser guided land leveler	2011	1	3.89	Good
Power tiller	2011	1	2.72	Good
Rotavator	2022	1	1.23	Good
Tamarind de-seeder	2022	1	1.11	Good

1.8. Details of SAC meeting organised

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
09-01-2025	26	Conduct one trial of each FLD in KVK's Instructional Farm	These recommendations will be included in the Action Plan of 2025-26	
		Demonstration board must contain the date of initiation of Natural Farming in KVK Farm		
		Arrange visit of SAC Members to KVK's Instructional Farm		
		Continue conducting awareness & training programmes on Natural Farming and Organic farming		
		The feedback on the demonstrated technologies needs to be given to the Research Institutes and Universities.		
		Promote dryland horticulture by including in-situ grafting plants like Mango and Cashew		
		Takeup programmes for popularization of micro-greens		
		Conduct programmes for promotion of roof gardening in semi urban and urban areas		
		Include demonstrations on silage making, enrichment of dry fodder etc., in all training programmes		
		Conduct few activities on Fishery in collaboration with Fisheries Department.		
		Conduct few more awareness programmes on crop rotation and seed treatment		
		Conduct more programmes on promotion of Millets and awareness on processing of Millets		
		Take up demonstrations in Bengalgram using BGD-111-01 variety also		
		Conduct more number of programmes w.r.t. promotion of Maize+Redgram intercropping system		
		Conduct few more programmes on Promotion of ODOP crop Chilli seed production as well as value addition		
		Demonstrate new variety of onion NHRDF-883		
		Conduct awareness programmes on sexed semen for increasing ratio of female calves in milking animals in collaboration with BAIF		
		Further, promotion of green fodder production in all adopted villages may be takenup		
		Conduct awareness on storage of by-products of Pulse and other agriculture produce for using as fodder		
		NABARD intends to train FPOs in agriculture and allied fields and he requested KVK's collaboration		
		Take demonstration of BGD-111-1 variety of Bengalgram crop in FLDs		
		Include BGD-133 variety in Bengalgram crop under OFT		
		Conduct demonstration on DC-15 variety of Cowpea crop		
		Conduct demonstration in Sunflower crop with KBSH-90 variety released by UAS, Bangalore and RSFH-700 released by UAS, Raichur		
		Conduct farm trial with liquid form of trichoderma (@ 10ml/kg of seeds) in Bengalgram crop to control wilt problem in KVK Farm.		

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
Rainfed situation	
1	Agricultural crops + Dairy enterprise
2	Agricultural crops + Horticultural crops
3	Agriculture + Horticulture + Dairy enterprise
Irrigated situation	
1	Agriculture + Dairy enterprise
2	Agriculture + Horticulture + Dairy enterprise

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

S. No	Agro-climatic Zone	Characteristics
1	Northern Dry Zone-3 and Region-2 of the state	This zone comprises of Gadag, Ron, Mundaragi, Gajendragad and Naragund blocks. Rainfall ranges from 450-600 mm with 30-35 rainy days mainly from June – September months. Maximum temperature ranges from 36-40^0 c. This zone is drought prone. **Kharif crops grown:** Greengram, Groundnut, Onion, Bt. Cotton Chilli, Sunflower, Maize etc **Rabi crops grown:** Bengalgram, Rabi Sorghum, wheat, sunflower etc
2	Northern Semi Transitional Zone-8 and Region-4 of the state	This zone comprises of Shirahattiand Laxmeshwar blocks. Average rainfall is 619 mm. Gets rainfall from both South-West and North-East mansoons. **Kharif crops grown:** Greengram, Sorghum, Bt-cotton, Groundnut, Sunflower, Millets, Maize, Onion, Chillietc **Rabi crops grown:**Rabi Sorghum, Sunflower, Bengal gram, Wheat etc

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Very shallow red gravelly loam soils	Less water holding capacity with less runoff and high infiltration rate,	26,625
2	Shallow red gravelly mixed with deep black soils	Less water holding capacity with moderate runoff and high infiltration rate. It contains high sand percent.	10,659
3	Medium deep red clayey soils	Moderate water holding capacity with less runoff and moderate infiltration rate. It contains high clay percent.	25,210
4	Medium deep red gravelly clay soils	Moderate water holding capacity with less runoff and high infiltration rate. It contains high clay percent.	63,163
5	Deep red gravelly clay soils	High water holding capacity with less runoff and less infiltration rate. It contains high clay percent.	8,290
6	Medium deep black clayey soils	Moderate water holding capacity with high runoff and less infiltration	1,50,117
7	Deep black clayey soils	More water holding capacity with low infiltration rate of water & clay content is more than 35 percent	67,444
8	Deep black calcareous clayey soils	More water holding capacity with low infiltration rate and high runoff. It contains more percent of Calcium	92,238
9	Deep alluvial black clayey soils	More water holding capacity with low infiltration rate and high run off.	17,088
10	Deep alluvial clayey soils (salt affected in patches)	More water holding capacity, less infiltration rate and high run off affects the seed germination	1,053
		Total	**4,61,887**

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

Crops	Area (ha)		Production (t)		Productivity (kg/ha)	
	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
Cereals						
Maize	**38468**	**-**	**135651**	**-**	**3712**	**-**
Rabi Sorghum	**-**	**76846**	**-**	**54471**	**-**	**746**
Wheat	**18042**	**-**	**9701**	**-**	**566**	**-**
Paddy	**2437**	**-**	**7638**	**-**	**3299**	**-**
Millets						
Pulses						
Greengram	**-**	**77077**	**-**	**6224**	**-**	**85**
Bengalgram	**-**	**132538**	**-**	**58549**	**-**	**465**
Tur	**-**	**3373**	**-**	**2150**	**-**	**671**
Oilseeds						
Groundnut	**-**	**36275**	**-**	**32341**	**-**	**938**
Sunflower	**-**	**31373**	**-**	**18151**	**-**	**609**
Spices and Condiments						
Chilli	**-**	**15102**	**-**	**72489**	**-**	**480**
Plantation and Horticultural Crops						
Vegetables						
Onion	**-**	**29671**	**-**	**343420**	**-**	**11500**
Fruits						
Mango	**-**	**2915**	**-**	**9475**	**-**	**1300**

Source: Department of Agriculture, Gadag – 2022-23

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
January, 2024	0.0	34.0	16.5	44
February, 2024	0.0	36.5	18.0	38
March, 2024	0.0	39.0	20.0	36
April, 2024	30.4	41.0	22.5	46
May, 2024	70.0	42.0	24.0	57
June, 2024	108.8	40.0	23.0	77
July, 2024	71.2	38.0	22.0	82
August, 2024	100.8	37.5	22.0	81
September, 2024	58.2	37.0	22.5	79
October,2024	125.4	36.0	21.5	71
November, 2024	5.0	34.0	19.0	58
December, 2024	11.4	32.0	17.0	50

2.6. Production and Productivity of Livestock, Poultry, Fisheries etc. in the district

Category	Population	Milk Production (Liters)	Meat Production (Tonnes)	Productivitiy (Liters/Animal)
Cattle	76846	12,00,000	2000	15.7
Buffalo	77077	15,00,000	3000	19.5
Sheep	132538	-	1200	-
Goat	33173	-	800	-
Pigs	3917	-	500	-
Poultry	156275	72 lakh (Eggs)	2500	100 per year (Eggs)

2.7 District profile has been **Updated** for 2024 : Yes (Latest available data is uploaded)

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
1	Gadag	Asundi (Gadag block)	3 Years	Maize	• Practicing mono cropping • Imbalanced nutrition • Application of excess Nitrogen • Incidence of Army worm • Incidence of Turcicum leaf blight	• FLD on Maize + Redgram intercropping system • Training on ICM practices in Maize • Supply of literature • Field day
				Rabi Sorghum	• Low productivity due to use of local variety • Incidence of Charcoal stem rot diseases • Incidence of shoot fly and stem borer • Problem of lodging in existing variety	• Training on ICM practices in Rabi Sorghum • Supply of literature
				Greengram	• Low yield due to use of local variety • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of Powdery mildew and Pod borer • Seed shattering problem during harvesting in local variety China Moong	• FLD on ICM practices in Greengram • Training on ICM in Greengram • Supply of literature • Field day
				Bengalgram	• Low yield due to cultivation of local varieties • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of pod borer • Incidence of Wilt and Rust	• Training on ICM practices in Bengalgram • Supply of literature • Field day

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
					• Non profitability due to no nipping Drudgery of Operation involved in Manual Nipping of Chickpea	• FLD on solar nipping machine • Trainings on use of machineries in chickpea cultivation • Field day
				Bt. Cotton	• Incidence of Pink bollworm • Incidence of Leaf reddening • Incidence of sucking pests	• Training on IPM practices in Bt. Cotton
				Summer Groundnut	• Low yield due to use of local varieties • Imbalanced nutrition • Incidence of collar rot and root grub	• FLD on INM in Summer Groundnut • Training on ICM practices in summer groundnut • Field Day • Supply of literature
					• Drudgery involved in manual harvesting • Low income due to high labour cost	• FLD on demonstration of tractor operated Groundnut digger cum elevator • Trainings on use of machineries in groundnut cultivation
				Safflower	• Low productivity due to cultivation of local variety • Incidence of sucking pests • Incidence of Capsule borer • Incidence of Alternaria leaf spot	• Training on ICM practices in Safflower • Supply of literature • Field Day
				Vegetable crops	• Low income due to cultivation of local varieties • Application of imbalanced fertilizers	• Trainings on ICM in vegetable crops • Supply of literature • Field day
				Okra	• Low productivity due to cultivation of local variety • Incidence of sucking pests • Incidence of yellow vein mosaic virus	• Training on ICM practices • Supply of literature

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Red Chilli	• Non-availability of quality and pure seeds of Byadgi Dabbi • Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases • Improper post-harvest management (Drying & storage of chilli and its powder)	• FLD on ICM in Chilli crop • Training on ICM • Training on post harvest technologies • Supply of relevant literature • Farm advisory services • Rendering Kisan Mobile Advisory Services to farmers • Field day
				Onion	• Imbalanced nutrition application without soil testing • Low productivity in existing variety Bellary Red onion • Low keeping quality of bulbs in existing variety • High incidence of thrips & purple blotch • High incidence of weeds • High labour requirement in detopping of harvested onion crop	• FLD on introduction of Bhima Super variety along with ICM practices • Demonstration of Battery Operated Onion Detopper • Trainings on ICM in onion crop • Seed production activities with identified seed farmers for supply of quality seeds of Bhima Super variety in village • Supply of relevant literature • Field day
				Nutrition and health	• Less consumption of fruits and vegetables • Lack of awareness on health &nutritionandbalanced diet	• FLD on Nutri Garden • Training on balanced diet and nutrition • Training on importance of millets in diet • Field day
				Millets	• Low productivity due to cultivation of local variety • Lack of awareness on millet nutrition and value addition	• Training on ICM in millets • Training on preparation of millet products • Supply of literature

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Grain storage	• Incidence of stored grain pest	• Training on management of stored grain pests • Supply of literature
				Sheep and goat	• Low body weight in kids and lambs	• FLD on feeding of specific mineral mixture as nutrients with deworming for small ruminants to improve weight gain • Training on scientific management of sheep and goats • Supply of literature • Mobile advisory services • Field day
2	Mundaragi	Halligudi	3 Years	Rabi Sorghum	• Incidence of Charcoal stem rot diseases • Incidence of shoot fly and stem borer • Problem of lodging	• Training on ICM practices in Rabi Sorghum • Supply of literature
				Greengram	• Low yield due to use of local variety • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of Powdery mildew and Pod borer • Seed shattering problem during harvesting in local variety China Moong • High drudgery of operation involved in manual weeding	• OFT on assessment of high yielding varieties of Greengram • FLD on ICM practices in Greengram • FLD on Compartmental Bund Former • FLD on demonstration of engine operated weeder in Greengram • Training on ICM in Greengram • Supply of literature • Field day

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Bengalgram	• Low yield due to cultivation of local varieties • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of pod borer • Incidence of Wilt and Rust	• FLD on ICM practices in Bengalgram • Training on ICM practices in Bengalgram • Supply of literature • Field day
					• Low yield due to moisture stress • Non profitability due to no nipping • Drudgery of Operation involved in Manual Nipping of Chickpea	• FLD on compartmental bund former • FLD on demonstration of solar nipping machine • Trainings on use of machineries in chickpea cultivation
				Safflower	• Low productivity due to cultivation of local variety • Incidence of sucking pests • Incidence of Capsule borer • Incidence of Alternaria leaf spot	• OFT on Assessment of different varieties of Safflower crop for higher productivity • FLD on ICM practices in A-2020 variety • Training on ICM practices in Safflower • Supply of literature • Field Day
				Red Chilli	• Non-availability of quality and pure seeds of Byadgi Dabbi • Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases	• FLD on ICM in Chilli crop • Training on ICM • Supply of relevant literature • Farm advisory services • Rendering Kisan Mobile Advisory Services to farmers • Field day
				Onion	• Low income due to cultivation of local varieties • Imbalanced nutrition without soil	• FLD on introduction of Bhima Super variety along with ICM practices • Trainings on ICM in onion crop

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
					testing • Low keeping quality bulbs in existing variety • High incidence of thrips & purple blotch • High incidence of weeds • High labour requirement in detopping of harvested onion crop	• Demonstration of battery operated detopper • Trainings on use of battery operated detopper • Seed production activities with identified seed farmers • Supply of quality seeds of Bhima Super variety • Supply of relevant literature • Field day
				Nutrition and health	• Less consumption of fruits and vegetables • Lack of awareness on balanced diet and nutrition	• Training on balanced diet and nutrition
				Grain storage	• Incidence of stored grain pest	• Training on management of stored grain pests • Supply of literature
				Millets	• Lack of awareness on millet nutrition and value addition	• Training on preparation of millet products • Supply of literature
3	Laxmeshwar	Akkigund		Maize	• Low income due to mono cropping of maize • Imbalanced nutrition • Incidence of Army worm • Incidence of Turciccum leaf blight	• FLD on Maize + Redgram intercropping system • Trainings on ICM practices in Maize + Redgram intercropping system • Supply of literature • Field day

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Rabi Sorghum	• Low productivity due to use of local variety • Incidence of Charcoal stem rot diseases • Incidence of shoot fly and stem borer • Problem of lodging in existing variety	• Training on ICM practices in Rabi Sorghum • Supply of literature • Field day
				Greengram	• Low yield due to use of local variety • Imbalanced nutrition • Low yield due to incidence of Powdery mildew and Pod borer • Seed shattering problem during harvesting in local variety China Moong	• FLD on ICM practices in Greengram • Training on ICM in Greengram • Supply of literature • Field day
				Blackgram	• Low yield due to use of local varieties • Incidence of Powdery mildew • Incidence of pod borer	• FLD on high yielding LBG-791 variety of Blackgram • Training on ICM practices in Blackgram • Supply of literature
				Bengalgram	• Low yield due to cultivation of local varieties • Imbalanced nutrition • Low yield due to incidence of pod borer • Incidence of Wilt and Rust	• Trainings on ICM practices in Bengalgram • Supply of literature • Field day
				Spreading groundnut	• Low productivity in existing local varieties • Imbalanced nutrition • Incidence of leaf minor and leaf spot	• Trainings on ICM practices in Spreading groundnut • Supply of relevant literature

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Soybean	• Low productivity due to cultivation of local variety	• FLD on Introduction of KDS-753 variety of Soybean • Trainings • Supply of literature
				Bt. Cotton	• Incidence of pink bollworm • Problem of leaf reddening • Incidence of sucking pests	• Training on ICM practices in cotton
				Milch cattle (CB Cows)	• Low productivity of milk due to non-availability of green fodder throughout the year.	• FLD on multiple varieties of perennial fodder production and feeding to CB cows for enhanced milk yield • 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 • Lack of awareness on balanced diet and nutrition	• FLD on Nutri Garden • Training on balanced diet and nutrition • Training on importance of millets in diet • Field day
				Grain storage	• Incidence of stored grain pest	• Training on management of stored grain pests • Supply of literature
4	Naragund	Muganur	3 Years	Maize	• Imbalanced nutrition • Application of excess Nitrogen • Incidence of Army worm • Incidence of Turcicum leaf blight	• Trainings on ICM practices in maize • Supply of literature

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Rabi Sorghum	• Low productivity due to use of local variety • Incidence of Charcoal stem rot diseases • Incidence of shoot fly and stem borer • Problem of lodging in existing variety	• OFT on Assessment of Rabi Sorghum varieties for higher productivity • Training on ICM practices in Rabi Sorghum • Supply of literature • Field day
				Greengram	• Low yield due to use of local variety • Imbalanced nutrition • Low yield due to incidence of Powdery mildew and Pod borer • Seed shattering problem during harvesting in local variety China Moong	• FLD on ICM practices in Greengram\ • Training on ICM in Greengram • Supply of literature • Field day
				Wheat	• Low productivity due to use of local varieties • Incidence of stem borer • Incidence of rust and leaf spot	• Training on ICM practices in wheat • Supply of literature
				Bengalgram	• Low yield due to cultivation of local varieties • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of pod borer • Incidence of Wilt and Rust • Non profitability in existing farming system due to moisture stress	• OFT on assessment of high yielding varieties in Bengalgram crop • Field day • Supply of literature
				Safflower	• Low productivity due to cultivation of local variety • Incidence of sucking pests	• Training on ICM practices in Safflower • Supply of literature • Field Day

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
					• Incidence of Capsule borer • Incidence of Alternaria leaf spot	
				Onion	• Low productivity due to imbalanced nutrition • Low productivity due to cultivation of low yielding variety Double Red • Incidence of thrips reduces the yields	• FLD on introduction of Bhima Super variety along with ICM practices • Trainings on ICM in onion crop • Supply of quality seeds of Bhima Super variety • Supply of relevant literature&Field day
				Calf	• Low rate of body weight gain and delay in maturity due to malnutrition	• FLD on feeding of calf starter with deworming to get gain in body weight and to attain early maturity • Training • Supply of literature • Field day
				Nutrition and health	• Less consumption of millets, fruits and vegetables in daily diet	• Training on health and nutrition, importance of millets in diet
5	Shirahatti	Suganalli	1 Year	Maize	• Low income due to cultivation of Maize as a sole crop • Imbalanced nutrition • Application of excess Nitrogen • Incidence of Army worm • Incidence of Turcicum leaf blight	• FLD on Maize+Redgram Intercropping system • Trainings • Supply of literature
				Rabi Sorghum	• Low productivity due to use of local variety M 35-1 • Shoot fly and smut disease • Incidence of fall army worm and charcoal stem rot • Lodging problem	• Training on ICM practices in Rabi Sorghum • Supply of literature • Field day

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Greengram	• Low productivity due to use of China Moong variety • Incidence of spittle bug and pod borer • Incidence of powdery mildew, leaf spot & yellow vein mosaic • Discoloration of seeds during mechanical harvesting • High labour and drudgery involved in manual weeding	• FLD on ICM practices in Greengram • FLD on demonstration of engine operated weeder in Greengram • Training on ICM in Greengram • Supply of literature • Field day
				Blackgram	• Low yield due to use of local varieties • Incidence of Powdery mildew • Incidence of pod borer	• FLD on high yielding LBG-791 variety of Blackgram • Training on ICM practices in Blackgram • Supply of literature
				Bengalgram	• Low yield due to cultivation of local varieties • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of pod borer • Incidence of Wilt and Rust	• Training on ICM practices in Bengalgram • Trainings on use of machineries in Bengalgram cultivation • Field day • Supply of literature
				Vegetable crops	• Low income due to cultivation of local varieties and low yielding hybrids • Application of imbalanced fertilizers	• Assessment of Green Chillihybrids for higher productivity • Trainings on ICM in vegetable crops • Supply of literature • Field day
				Grain storage	• Incidence of stored grain pest	• Demonstration of Super grain bags • Training • Supply of literatures • Group discussion

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
						• Supply of Super grain bags
				Nutrition and health	• Less consumption of fruits and vegetables • Lack of awareness on balanced diet and nutrition	• FLD on Nutri Garden • Training on balanced diet and nutrition • Training on importance of millets in diet • Field day
				Foxtail Millet	• Lack of awareness on millet nutrition and value addition	• FLD on HN-46 variety of foxtail millet • Training on preparation of millet products • Supply of literature
				Pearl Millet	• Low productivity in local variety • Lack of awareness on bio-fortified Pearl Millet VPMV-9 variety • Lack of awareness on value added products of Pearl Millet in daily diet	• FLD on bio-fortified Pearl Millet VPMV-9 variety • Training • Field visits and Field Day • Method demonstration of value added products of Pearl Millet
				Milch cattle (CB Cows)	• Low productivity of milk due to non-availability of green fodder throughout the year.	• FLD on multiple varieties of perennial fodder production and feeding to CB cows for enhanced milk yield • 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
				Calf	• Low rate of body weight gain and delay in maturity due to malnutrition	• FLD on feeding of calf starter with deworming to get gain in body weight and to attain early maturity • Training

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
						• Supply of literature • Field day
				Sheep and goat	• Low body weight in kids and lambs	• FLD on feeding of specific mineral mixture as nutrients with deworming for small ruminants to improve weight gain • Training on scientific management of sheep and goats • Supply of literature • Mobile advisory services Field day
6	Ron	Madalageri	1 Year	Maize	• Imbalanced nutrition • Application of excess Nitrogen • Incidence of Army worm Incidence of Turcicum leaf blight	• Trainings on ICM practices in maize • Supply of literature •
				Rabi Sorghum	• Low productivity due to use of local variety • Incidence of Charcoal stem rot disease • Incidence of shoot fly, stem borer& fall army worm • Problem of lodging in existing variety	• Training on ICM practices in Rabi Sorghum • Supply of literature • Field day
				Foxtail Millet	• Lack of awareness on millet nutrition and value addition	• FLD on HN-46 variety of foxtail millet • Training on preparation of millet products • Supply of literature
				Pearl Millet	• Low productivity in local variety • Lack of awareness on bio-fortified Pearl Millet VPMV-9 variety • Lack of awareness on value added products of Pearl Millet in daily diet	• FLD on bio-fortified Pearl Millet VPMV-9 variety • Training • Field visits and Field Day • Method demonstration of value added products of Pearl Millet

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
				Greengram	• Low yield due to use of local variety • Imbalanced nutrition • Low yield due to incidence of Powdery mildew and Pod borer • Seed shattering and discoloration problem during harvesting • High labour and drudgery involved in manual weeding	• FLD on ICM practices in Greengram • FLD on demonstration of engine operated weeder in Greengram • Training on ICM in Greengram • Supply of literature • Field day
				Bengalgram	• Low yield due to cultivation of local varieties • Imbalanced nutrition and high cost of cultivation • Low yield due to incidence of pod borer • Incidence of Wilt and Rust	• Training on ICM practices in Bengalgram
				Safflower	• Low productivity due to cultivation of local variety • Incidence of sucking pests • Incidence of Capsule borer • Incidence of Alternaria leaf spot	• Training on ICM practices in Safflower • Supply of literature • Field Day
				Onion	• Low productivity due to imbalanced nutrition • Low productivity due to cultivation of low yielding variety Double Red • Incidence of thrips reduces the yields • High labour requirement in detopping of harvested onion crop	• FLD on introduction of Bhima Super variety along with ICM practices • Trainings on ICM in onion crop • Demonstration of battery operated onion detopper • Trainings on use of battery operated onion detopper • Seed production activities with identified seed farmers • Supply of quality seeds of Bhima Super variety

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
						• Supply of relevant literature & Field day
				Red Chilli	• Non-availability of quality and pure seeds of Byadagi Dabbi • Lack of proper knowledge on ICM practices resulting in poor productivity and quality with high incidence of pest and diseases	• FLD on ICM in ByadagiChilli crop • FLD on pure seed production in ByadagiChilli • Training on ICM • Supply of relevant literature • Farm advisory services • Rendering Kisan Mobile Advisory Services to farmers • Field day
				Nutrition and health	• Less consumption of fruits and vegetables • Lack of awareness on nutrition and balance diet	• FLD on Nutri Garden • Training on balanced diet and nutrition • Training on importance of millets in diet • Field day
				Grain storage	• Incidence of stored grain pest	• FLD on demonstration of Super grain bags • Training on management of stored grain pests • Home visits and interactive meetings • Supply of literature • Supply of super grain bags
				Milch cattle (CB Cows)	Low productivity of milk due to non-availability of green fodder throughout the year.	• FLD on multiple varieties of perennial fodder production and feeding to CB cows for enhanced milk yield • Training on scientific management of milch cattle • Supply of literature • Field visit • Mobile advisory services • Field day

Sl. No.	Taluk	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problems identified	Identified Thrust Areas
						Animal health camps in collaboration with Department of Animal Husbandry
				Calf	Low rate of body weight gain and delay in maturity due to malnutrition	• FLD on feeding of calf starter with deworming to get gain in body weight and to attain early maturity • Training • Supply of literature • Field day •
				Sheep and goat	Low body weight in kids and lambs	• FLD on feeding of specific mineral mixture as nutrients with deworming for small ruminants to improve weight gain • Training on scientific management of sheep and goats • Supply of literature • Mobile advisory services • Field day

2.9 Priority thrust areas

S. No	Thrust area
1	Soil fertility management through production and application of bio-manures
2	Conservation agriculture practice for higher productivity in Chickpea
3	Promotion of DBGV-204, NBeG-49 and Phule Vikram varieties of Bengalgram under protective irrigation
4	Promotion of SPV-2217 variety of Rabi Sorghum
5	Promotion of Foxtail Millet HN-46 and Bio-fortified Pearl Millet
6	Promotion of ODOP crop
7	Assessment of different Safflower varieties for higher productivity
8	Demonstration of different varieties in vegetables, medicinal and aromatic crops
9	Promotion of nutri-farms
10	Popularisation of drudgery reduction equipments
11	Post harvest technologies
12	Livestock nutrition for higher milk productivity

PART III - TECHNICAL ACHIEVEMENTS

3.A. Target and Achievements of mandatory activities

OFT				FLD			
1				2			
OFTs (No.)		Farmers (No.)		FLDs (No.)		Farmers (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
5	5	20	20	22	22	292	292

Training (Farmers/farm women)				Training (Rural youth)			
3				4			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
111	116	2500	2644	15	19	450	501

Training (Extension personnel)				Training (sponsored)			
5				6			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
20	22	700	729	30	49	900	1715

Training (Vocational)				Extension Programmes			
7				8			
sCourses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
10	13	300	343	300	398	25000	26885

Seed Production (Q)		Planting material (Nos.)	
9		10	
Target	Achievement	Target	Achievement
40.00	43.27	40000	49485

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
11		12	
Target	Achievement	Target	Achievement
5	1	14000	14460

Soil, water, plant and manure analysis (including mobile kits)				Mobile agro advisories provided			
13				14			
Samples (No.)		Farmers (No.)		Messages including text, voice (No.)		Farmers (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
800	858	800	844	100	103	100000	125828

3.B1. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
1	Varietal demonstration	Rabi Sorghum	Low productivity in exiting M-35-1 variety	-	Demonstration of SPV-2217 variety in Rabi Sorghum crop	2	-	-	6	1.00	-	-	-	10
2	Varietal demonstration	Foxtail Millet	Low production due to use of local variety		Demonstration of ICM in HN-46 variety of Foxtail Millet	2	1	4	1	0.30	-	-	-	-
3	Varietal demonstration	Pearl Millet	Low production due to use of local variety		Demonstration of ICM in VPMV-9 variety of Pearl Millet	2	-	-	2	0.10	-	-	-	-
4	Varietal Assessment	Greengram	Low productivity due to cultivation of local variety	Assessment of high yielding varieties of Greengram	-	02	-	-	02	0.5	-	-	-	-
5	Varietal Demonstration	Greengram	Low productivity due to cultivation of local variety	-	Demonstration of DGGV-2 variety in Greengram crop	02	-	-	05	1.25	-	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
6	Farm Mechanization	Greengram	i. High cost of operation in manual weeding method ii. Drudgery of operation involved in manual weeding	-	Demonstration of Engine Operated Weeder in Greengram	02	-	-	06	-	-	-	-	-
7	Varietal Demonstration	Soybean	Low productivity due to cultivation of local variety	-	Demonstration of KDS-753 variety of Soybean crop	02	-	-	03	1.25	-	-	-	-
8	Varietal Assessment	Bengalgram	Productivity of JAKI-9218 variety is low under irrigated condition	Assessment of potential productivity of DBGV-204, NBeG-49 and Phule Vikram varieties	-	4	-	-	5	4.0	-	-	-	1.5
9	Resource Conservation Technology	Bengalgram	i. Non profitability due to moisture stress,	Assessment of conservation agriculture	-	02	-	-	04	0.9	-	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
			ii. Deterioration of soil physical properties due to repeated use of machineries especially Rotavator& reduced water application efficiency	practice for higher productivity in Bengalgram preceeded with Maize crop										
10	ICM	Bengalgram	Low yield in existing local varieties	-	Demonstration of JAKI-9218 vareity of Bengalgram crop	4	-	-	7	0.5	-	-	-	65
11	Farm Mechanization	Bengalgram	Low productivity due to moisture stress	-	Demonstration of tractor operated compartmental bund former in Bengalgram crop	02	-	-	05	-	-	-	-	-
12	Farm Mechanization	Bengalgram	i. Low productivity due to no nipping	-	Demonstration of solar nipping	03	-	-	08	-	-	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
			ii. High labour and time consumption in hand nipping method		machine in Bengalgram crop									
13	Varietal demonstration	Blackgram	Low productivity in local variety	-	Demonstration of LBG-791 variety of Blackgram	2	-	-	2	0.7	-	-	-	10
14	Varietal assessment	Safflower	Low productivity due to cultivation of local variety	Assessment of different Safflower varieties for higher productivity	-	2	-	-	5	0.63	-	-	-	-
15	ICM	Safflower	Low productivity due to cultivation of local variety	-	Demonstration of ICM practices in high yielding ISF-764 variety of Safflower	3	-	-	4	0.86	-	-	-	-
16	INM	Summer Groundnut	Low yield due to imbalanced nutrition & lack of knowledge on		Demonstration of INM in Summer Groundnut	4	-	-	10	-	-	-	-	1203

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
			application of micro nutrients											
17	Farm Mechanization	Summer Groundnut	i) High labour and time requirement in manual harvesting method ii) Pod damage in harrowing method	-	Demonstration of Tractor operated Groundnut Digger cum Elevator	02	-	-	10	-	-	-	-	-
18	Varietal Assessment	Green Chilli	High cost involved in the purchase of private hybrids resulting in low income	Assessment of Green chilli Hybrids for higher productivity	-	5	-	-	8	-	30000	-	-	-
19	Integrated Crop Management	Onion	Low income due to cultivation of local varieties Gurva& Bellary red	-	Demonstration of ICM in Red onion variety Bheema Super	9	-	-	13	0.10	-	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
20	Integrated Crop management in Chilli	Red Chilli (Byadagi Dabbi)	i) Non-availability of quality and pure seeds of Byadagi Dabbi, ii) High incidence of sucking pests leading to murda complex disease & anthracnose disease iii) Lack of proper knowledge on ICM practices resulting in poor productivity and quality& Improper post-harvest management	-	Integrated Crop Management ByadagiChilli	8	-	-	10	0.07	3500 (Marigold seedlings)	-	2	7Kg: *Beauveria bassiana* and 7lit: *Lecanicillium lecanii*

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
21	Integrated Crop Management	Okra	High cost involved in the purchase of private hybrids resulting in low income	-	ICM in Okra Hybrid Arka Nikita for higher productivity	4	-	-	10	0.06	-	-	-	-
22	Health & Nutrition	Nutrition Garden	Lack of awareness on Nutri Garden & less consumption of fruits and vegetables	-	Nutri Garden	6	1	2	15	10 Kg	175	-	-	1025
23	Grain storage	Super grain bags	Incidence of stored pest in grains	-	Demonstraiton of Super grain bags	2	-	-	12	-	-	-	-	-
24	Nutrition Management in dairy animals	Fodder production	Low productivity of milk in CB cow due to Non-cultivation of perennial fodder and grass species	-	Demonstration of Fodder Production	1	12	2	15	1.05	40931	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live-stock (No.)	Supply of bio products	
													No.	Kg
25	Dairy	CB Cow	Delayed maturity in CB Calves	-	Feeding of calf starter with deworming in CB calves to attain early maturity	1	3	1	8	-	-	-	-	500 (Calf starter)
26	Sheep and goat	Goat kid	Loss of gain in body weight	-	Feeding of mineral mixture (Goatmin) with deworming to goat kid to gain body weight	2	3	-	9	-	-	-	-	10 Kg (Goatmin-Mineral Mixture)

3.B2. Details of technology used during reporting period

S. No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Extension activities)
1	2	3	4	5	6	7	8
1	Demonstration of SPV-2217 variety in Rabi Sorghum crop	UAS, Dharwad	Rabi Sorghum	-	20	2	6
2	Demonstration of ICM in HN-46 variety of Foxtail Millet	UAS, Dharwad	Foxtail Millet	-	10	2	9
3	Demonstration of ICM in bio-fortified VPMV-9 variety of Pearl Millet	UAS, Dharwad	Pearl Millet	-	5	2	6
4	Assessment of high yielding varieties of Greengram	UAS, Dharwad	Greengram	3	-	2	5
5	Demonstration of DGGV-2 variety in Greengram crop	UAS, Dharwad	Greengram	-	25	2	2
6	Demonstration of Engine Operated Weeder in Greengram	UAS, Raichur	Greengram	-	5	1	6
7	Demonstration of KDS-753 variety of Soybean crop	MPKV, Rahuri	Soybean	-	5	2	4
8	Assessment of potential productivity of DBGV-204, NBeG-49 and Phule Vikram varieties	UAS, Dharwad PJTSAU, Hyderabad	Bengalgram	5	-	4	5
9	Assessment of conservation agriculture practice for higher productivity in Chickpea preceeded with Maize crop	PAU, Ludhiana	Bengalgram	3	-	3	1
10	Demonstration of JAKI-9218 vareity of Bengalgram crop	UAS, Dharwad	Bengalgram		25	4	7
11	Demonstration of tractor operated compartmental bund former in Bengalgram crop	UAS, Raichur	Bengalgram	-	10	2	5
12	Demonstration of solar nipping machine in Bengalgram crop	UAS, Raichur	Bengalgram	-	10	3	8
13	Demonstration of LBG-791 vareity of Blackgram	UAS, Dharwad	Blackgram	-	10	2	6
14	Assessment of different Safflower varieties for higher productivity	ICAR-IIOR, Hyderabad & UAS, Dharwad	Safflower	4	-	2	5

S. No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Extension activities)
15	Demonstration of ICM practices in high yielding ISF-764 variety of Safflower	ICAR-IIOR, Hyderabad	Safflower	-	10	3	4
16	Demonstration of INM in Summer Groundnut	UAS, Dharwad	Groundnut	-	6	2	10
17	Demonstation of Tractor operated Groundnut Digger cum Elevator	UAS, Dharwad	Groundnut	-	10	2	10
18	Assessment of Green chilli Hybrids for higher productivity	ICAR-IIHR, Bengaluru	Green chilli	5	-	5	8
19	ICM in Red onion variety Bheema Super	UHS Bagalkot and ICAR-DOGR, Pune	Red Onion	-	10	9	13
20	ICM in ByadagiChilli variety Rudra	ICAR- IIHR, Bengaluru and UAS, Dharwad	Red chilli	-	7	8	10
21	ICM in Okra Hybrid Arka Nikita for higher productivity	ICAR-IIHR, Bengaluru	Okra	-	6	4	8
22	Nutrition Garden	UAS, Bengaluru	Health and nutritional security	-	25	9	15
23	Super grain bags	UAS, Raichur	Grain storage	-	40	2	12
24	Demonstration of Fodder production	ICAR-IGFRI, RRS, Dharwad & UAS, Dharwad	CB Cows	-	10	15	15
25	Feeding of calf starter with deworming in CB calves to attain early maturity	KVAFSU, Bidar	CB Calves	-	10	5	8
26	Feeding of mineral mixture (Goatmin) with deworming to goat kid to gain body weight	NINP, Bengaluru	Goat kid	-	10	5	9

3.B2 contd..

	No. of farmers covered															
	OFT				FLD				Training				Others (Extension activities)			
	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Demonstration of SPV-2217 variety in Rabi Sorghum crop	0	0	0	0	16	4	0	0	30	12	12	8	110	28	10	2
Demonstration of ICM in HN-46 variety of Foxtail Millet	0	0	0	0	6	2	1	1	51	8	4	10	60	20	18	18
Demonstration of ICM in VPMV-9 variety of Pearl Millet	0	0	0	0	4	1	0	0	30	24	9	6	36	52	18	15
Assessment of high yielding varieties of Greengram	02	-	01	-	-	-	-	-	55	25	8	2	44	12	5	1
Demonstration of DGGV-2 variety in Greengram crop	-	-	-	-	23	02	-	-	41	19	4	3	42	22	5	4
Demonstration of Engine Operated Weeder in Greengram	-	-	-	-	7	-	3	-	58	0	7	1	55	04	8	3
Demonstration of KDS-753 variety of Soybean crop	-	-	-	-	4	0	1	0	37	13	5	2	64	28	10	7
Assessment of potential productivity of DBGV-204, NBeG-49 and Phule Vikram varieties	5	0	0	0	0	0	0	0	72	30	10	8	75	46	10	12
Assessment of conservation agriculture practice for higher productivity in Chickpea preceeded with Maize crop	2	0	1	0	0	0	0	0	55	25	8	2	44	12	5	1

	No. of farmers covered															
	OFT				FLD				Training				Others (Extension activities)			
	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Demonstration of JAKI-9218 vareity of Bengalgram crop	0	0	0	0	23	0	2	0	69	30	8	4	86	43	12	9
Demonstration of tractor operated bund former in Bengalgram crop	0	0	0	0	9	0	1	0	41	19	4	3	42	22	5	4
Demonstration of solar nipping machine in Bengalgram crop	-	10	3	8	8	0	2	0	37	13	5	2	64	28	10	7
Demonstration of LBG-791 variety of Blackgram	0	0	0	0	6	1	2	1	45	7	1	2	28	16	12	8
Assessment of ISF-764, A-2020 & DASF-13 Safflower varieties for higher productivity	3	0	0	0	0	0	0	0	45	10	4	1	20	10	6	2
Demonstration of ICM practices in high yielding ISF-764 variety of Safflower	0	0	0	0	8	0	2	0	34	12	8	4	57	33	6	3
Demonstration of INM in Summer Groundnut	0	0	0	0	5	1	0	0	55	24	9	5	78	45	10	2
Demonstration of Tractor operated Groundnut Digger cum Elevator	0	0	0	0	8	0	2	0	28	32	0	0	48	25	12	10
Assessment of Green chilli Hybrids for higher productivity	1	2	1	1	0	0	0	0	85	15	42	8	28	12	18	4
ICM in Red onion variety Bheema Super	0	0	0	0	10	0	0	0	129	19	38	18	46	12	28	8

	No. of farmers covered															
	OFT				FLD				Training				Others (Extension activities)			
	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ICM in ByadagiChilli variety Rudra	0	0	0	0	3	3	1	0	136	18	42	12	42	13	25	6
ICM in Okra Hybrid Arka Nikita for higher productivity	0	0	0	0	5	0	1	0	56	12	28	8	43	15	22	6
Nutrition Garden	0	0	0	0	5	20	0	4	25	245	10	17	45	204	5	20
Supe grain bags	0	0	0	0	12	23	3	2	11	30	3	6	20	35	4	6
Demonstration of Fodder production	0	0	0	0	10	0	0	0	227	45	20	15	92	54	25	17
Feeding of calf starter with deworming in CB calves to attain early maturity	0	0	0	0	8	0	2	0	102	36	8	6	43	56	12	14
Feeding of mineral mixture (Goatmin) with deworming to goat kid to gain body weight	0	0	0	0	7	0	2	1	110	18	9	5	55	50	18	12

PART IV - On Farm Trial

4.A1. Abstract on the number of technologies assessed in respect of crops :

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	Spice / Medicinal crops	TOTAL
Bee Keeping											
Biological control											
Canopy Management											
Crop Diversification											
Cropping Systems											
Drudgery Reduction											
Farm Machineries											
Fertigation Technique											
Fodder and Nursery raising											
High Density Planting											
Information and Communication Technology											
Integrated Crop Management											
Integrated Disease Management											
Integrated Farming System											
Integrated Nutrient Management											
Integrated Pest and Disease Management											
Integrated Pest Management											
Natural Farming											
Organic cultivation											
Plasticulture											
Post Harvest Technology											
Protected Cultivation											
Resource Conservation Technology			01								
Seed / Plant production											
Soil health management											
Storage Technique											
Varietal Evaluation		01	02		01						
Water management											
Weed Management											
Others, pl. specify											
Total		**01**	**03**		**01**						

4.A2. Abstract on the number of technologies refined in respect of crops : NIL

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest Management										
Integrated Crop Management										
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total										

4.A3. Abstract on the number of technologies assessed in respect of livestock : NIL

Thematic areas	**Cattle**	**Poultry**	**Piggery**	**Rabbit**	**Fisheries**	**TOTAL**
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

4.A4. Abstract on the number of technologies refined in respect of livestock : NIL

Thematic areas	**Cattle**	**Poultry**		**Piggery**	**Rabbit**	**Fisheries**	**TOTAL**
Evaluation of Breeds							
Nutrition Management							
Disease of Management							
Value Addition							
Production and Management							
Feed and Fodder							
Small Scale income generating enterprises							
TOTAL							

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technologies	No. of Technological options tested in each OFT	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all Technological Options in a farm)
Bee Keeping						
Biological control						
Canopy Management						
Crop Diversification						
Cropping Systems						
Drudgery Reduction						
Farm Machineries						
Resource Conservation Technology	Bengalgram	Assessment of conservation agriculture practice for higher productivity	3	3	3	0.8 ha / trial (Total : 2.4 ha)
Farm Machineries						
Fertigation Technique						
Fodder and Nursery raising						
High Density Planting						
Integrated Crop Management						

Thematic areas	Crop	Name of the technologies	No. of Technological options tested in each OFT	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all Technological Options in a farm)
Integrated Disease Management						
Integrated Farming System						
Integrated Nutrient Management						
Integrated Pest and Disease Management						
Integrated Pest Management						
Natural Farming						
Organic cultivation						
Plasticulture						
Post Harvest Technology						
Protected Cultivation						
Resource Conservation Technology						
Seed / Plant production						
Soil health management						
Storage Technique						
Varietal Evaluation	Greengram	Assessment of high yielding varieties of Greengram	3	3	3	0.8 ha / trial (Total : 2.4 ha)

Thematic areas	Crop	Name of the technologies	No. of Technological options tested in each OFT	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all Technological Options in a farm)
	Bengalgram	Assessment of potential productivity of JAKI-9218, DBGV-204, NBeG-49 and Phule Vikram varieties	5	5	5	0.8 ha / trial (Total :4 ha)
	Safflower	Assessment of ISF-764, A-2020 & DSAF-1 Safflower varieties for higher productivity	4	4	4	1.2 ha/trial (Total :3.6 ha)
	Green Chilli	Assessment of Green Chilli hybrids for higher productivity	3	5	5	0.6 ha / trial (Total: 3.0 ha)
Water management						
Weed Management						
Total			**18**	**20**	**20**	

4.B.2. Technologies Refined under various Crops : NIL

Thematic areas	Crop	Name of the technologies	No. of Technological options tested in each OFT	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all the Technological Options in farm)
Integrated Nutrient Management						
Varietal Evaluation						
Integrated Pest Management						
Integrated Crop Management						
Integrated Disease Management						
Small Scale Income Generation Enterprises						

Thematic areas	Crop	Name of the technologies	No. of Technological options tested in each OFT	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all the Technological Options in farm)
Weed Management						
Resource Conservation Technology						
Farm Machineries						
Integrated Farming System						
Seed / Plant production						
Value addition						
Drudgery Reduction						
Storage Technique						
Mushroom cultivation						
Cropping Systems						
Farm Mechanisation						
Others, Pl. Specify						
Total						

4.B.3. Technologies assessed under Livestock and other enterprises : NIL

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management				
Processing and Value addition				
Production and management				
Feed and fodder management				

Small scale income generating enterprises				
Others, pl. specify				
Total				

4.B.4. Technologies Refined under Livestock and other enterprises : NIL

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management				
Processing and Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Others, pl. specify				
Total				

4.B.5. Technologies assessed under various enterprises by KVKs

Sl. No.	Thematic areas	Name of the enterprise	Name of technology(s)	No. of Technological options tested in each OFT	No. of trials	No. of locations
1	Agroforestry management					
2	Bee keeping					
3	Crop residue management					
4	Drudgery reduction					
5	Energy conservation					
6	Entrepreneurship Development					
7	Fish seed production					
8	Household food security					
9	Information and Communication Technology (ICT)					
10	Integrated Farming system					
11	Mechanization					

Sl. No.	Thematic areas	Name of the enterprise	Name of technology(s)	No. of Technological options tested in each OFT	No. of trials	No. of locations
12	Mushroom Cultivation					
13	Nursery raising					
14	Organic farming					
15	Post Harvest Management					
16	Livestock Production and Management					
17	Processing and value addition					
18	Resource conservation technology	RCT	Conservation Agriculture	3	3	1
19	Small-scale income generation					
20	Storage techniques					
21	Vermicomposting					
	Others, pl. specify					

4.B.6.Technologies assessed under various enterprises for women empowerment : NIL

	Thematic areas	Name of enterprise	Name of technology(s)	No. of Technological options tested in each OFT	No. of trials	No. of locations
1	Drudgery Reduction					
2	Entrepreneurship Development					
3	Health and Nutrition					
4	Value Addition					
5	Women Empowerment					
6	Others(Home science)					

4.C1.Results of Technologies Assessed

(I) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield	Unit of yield	Observations other than yield (No. of pods per plant)	Gross Return Rs. / unit	Net Return Rs. / unit	BC Ratio (Gross income/ Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13
Greengram	Rainfed	Low productivity due to cultivation of local variety	Assessment of Production Potential of Different Greengram Varieties under Rainfed Condition	3	**T.O.1 (Farmers' practice):** Shining Moong	-	7.45	q/ha	25.67	64680	36680	2.31
					T.O.2: DGGV-2 variety	UAS, Dharwad	9.13	q/ha	32.45	79223	49848	2.70
					T.O.3: DGGV-7 variety	UAS, Dharwad	7.78	q/ha	27.23	67500	38000	2.28

4. C2.Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of high yielding varieties of Greengram	DGGV-2 variety grows taller than DGGV-7 and this makes it suitable for Mechanical harvesting	• Non availability of seeds on larger scale

4.C3. Details of Successfully completed technology assessment (support with necessary summary of data and photographs)

1. Title of Technology Assessed: Assessment of high yielding varieties of Greengram

2. Performance of the Technology on specific indicators

Varieties	Duration (Days)	Plant height (cm)	Pod length (cm)	100 seed weight (g)	Grain yield (q/ha)	% Increase in yield	Net returns (Rs/ha)	B:C Ratio
T1:Local: Shining Moong	93	32.78	8.38	4.23	7.45	-	36680	2.31
T2: DGGV-2	90	43.66	10.75	6.67	9.13	22.55	49848	2.70
T3: DGGV-7	93	33.45	8.67	4.91	7.78	4.43	38000	2.28

3. Specific Feedback from farmers: DGGV-2 variety grows taller than DGGV-7 and got more number of pods.

4. Specific Feedback from Extension personnel and other stakeholders: Nil.

5. Feedback to Research System based on results and feedback received: DGGV-7 is not suitable for mechanical harvesting and also low yield

6. Feedback on usefulness and constraints of technology: Since most of the Greengram crop under cultivation undergoes mechanical harvesting, DGGV 2 variety suits more for the District.

(II) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield (Qt/Ha)	Unit of yield	Observations other than yield (Plant height(cm))	Gross Return Rs./ha	Net Return Rs. / ha	BC Ratio (Gross income/ Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13
Bengalgram	Protective irrigation	Productivity of JG-11 variety is low under irrigated condition	Assessment of potential productivity of JAKI-9218, DBGV-204, NBeG-49 and Phule Vikram varieties	5	**T.O.1 (Farmers' practice)** Cultivation of JG-11 variety	-	10.83	Qtl/ha	29.90	64980	42880	2.94
					T.O.2: Cultivation of JAKI-9218 variety	UAS, Dharwad	11.55	Qtl/ha	30.32	69300	47740	3.21
					T.O.3 : Assessment of DBGV-204 variety	UAS, Dharwad	11.78	Qtl/ha	31.45	70680	49280	3.30
					T.O.4 : Assessment of NBeG-49 variety	PJTSAU, Hyderabad	12.08	Qtl/ha	33.88	72480	51100	3.39
					T.O.5 : Assessment of Phule Vikram variety	MPKV, Rahuri	13.05	Qtl/ha	38.79	78300	56000	3.51

3. C2.Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of potential productivity of JAKI-9218, DBGV-204, NBeG-49 and Phule Vikram varieties	NBeG-49 and Phule Vikram varieties are high yielding and suitable for mechanical harvesting. No constraints in adoption of these varieties.	NBeG-49 variety seeds need to be made available in large quantity especially in command area villages.

4.C3. Details of Successfully completed technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed :**Assessment of potential productivity of DBGV-204, NBeG-49 and Phule Vikram varieties

2. **Performance of the Technology on specific indicators**

Technology Assessed	Performance indicators						
	Grain Yield (Qtl/ha)	**Net Returns (Rs./ha)**	**B.C. Ratio**	**Plant height (cm)**	**No. of pods/plant**	**Test weight (g)**	**Duration (Days)**
Farmer's practice: Cultivation of JG-11 variety	10.83	42880	2.94	29.90	34.54	22.12	110
Recommended practice: Cultivation of JAKI-9218 variety	11.55	47740	3.21	30.32	36.23	22.87	110
Alternate practice-1: Assessment of DBGV-204 variety	11.78	49280	3.30	31.45	39.36	23.90	112
Alternate practice-2: Assessment of NBeG-49 variety	12.08	51100	3.39	33.88	42.24	24.54	114
Alternate practice-3: Assessment of Phule Vikram variety	13.05	56000	3.51	38.79	44.87	25.87	112

3.**Specific Feedback from farmers:**NBeG-49 and Phule Vikram varieties are high yielding and suitable for mechanical harvesting. No constraints in adoption of these varieties.

4.**Specific Feedback from Extension personnel and other stakeholders:** There is need to check suitability of NBeG-49 under rainfed condition also.

5. **Feedback to Research System based on results and feedback received:** NIL

6. **Feedback on usefulness and constraints of technology :**Both NBeG-49 and Phule Vikram varieties have performed very well. Farmers found both these varieties very useful in getting higher productivity and net returns

(III) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield (Qt/Ha)	Unit of yield	Observations other than yield (No. of capsules/Plant)	Gross Return Rs./unit	Net Return Rs. / unit	BC Ratio (Gross income/ Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13
Safflower	Rainfed	Low productivity due to cultivation of local variety	Assessment of ISF-764, A-2020 and DSAF-1 varieties for higher productivity	6	**T.O.1 (Farmers' practice) / Recommended practice** Cultivation of local A-1 variety	UAS, Dharwad	8.45	Qtl. /ha.	32	38025	20365	2.15
					T.O.2 Assessment of ISF-764 variety	IIOR, Hyderabad	9.40	Qtl. /ha	48	42300	24750	2.41
					T.O.3 Assessment of A-2020 variety	UAS, Dharwad	10.35	Qtl. /ha	56	46575	28455	2.57
					T.O.4 Assessment of DSAF-1 variety	UAS, Dharwad	10.68	Qtl. /ha	63	48038	29708	2.62

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of ISF-764 and A-2020and DSAF-1 varieties for higher productivity	DSAF-1 variety has following advantages • More number of capsules per plant • Higher grain weight	DSAF-1 variety seeds need to be made available in large quantity in the district.

4.C3. Details of Successfully completed technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed :** Assessment of ISF-764 and A-2020 and DSAF-1 varieties for higher productivity

2. **Performance of the Technology on specific indicators**

Technology Assessed	Performance indicators					
	Yield (Qtl/ha)	Net Returns (Rs./ha)	B.C. Ratio	% increase in yield	No. of capsules / plant	Plant Height (cm)
Farmer's practice: Cultivation of A-1 variety	8.45	20365	2.15	-	32	62
Alternate practice-1: Assessment of ISF-764 variety	9.40	24750	2.41	11.24	48	75
Alternate practice-2: Assessment of A-2020 variety	10.35	28455	2.57	22.49	56	107
Alternate practice-2: Assessment of DSAF-1 variety	10.68	29708	2.62	26.33	63	92

3.**Specific Feedback from farmers:** DSAF-1, A-2020 varieties gave better yield compared to other varieties and No. of capsules were more in DSAF-1 variety

4.**Specific Feedback from Extension personnel and other stakeholders:** Nil

5. **Feedback to Research System based on results and feedback received:** Nil

6. Feedback on usefulness and constraints of technology: DSAF-1 & A-2020 varieties have resulted in more yield & net returns

(IV) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield (q/ha)	Unit of yield	Observations other than yield (10 Fresh fruit weight in gms)	Gross Return Rs./unit	Net Return Rs. / unit	BC Ratio (Gross income/ Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13
Green chilli	Irrigated	High cost involved in the purchase of private hybrids resulting in low income	Assessment of Green chilli hybrids for higher productivity	3	**T.O.1 (Farmer practice)** Cultivation of Private Hybrids	-	177.61	**(q/ha)**	29.50	**390738**	**285978**	**3.73**
					T.O.2 Assessment of Arka Yashasvi Hybrid	ICAR-IIHR, Bengaluru	214.50	**(q/ha)**	40.00	**471900**	**362441**	**4.31**
					T.O.3 Assessment of Arka Tanvi Hybrid	ICAR-IIHR, Bengaluru	210.85	**(q/ha)**	35.50	**527135**	**418089**	**4.83**

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of Green Chilli hybrids Arka Yashasvi & Arka Tanvi	Fruits of Arka Tanvi are long and thin with attractive dark green colour and preferred in Gadag city market. Further, there was less incidence of Chilli Leaf Curl virus (ChiLCV)	-

4.C3. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed :** Assessment of Green chilli hybrids for higher productivity

2. **Performance of the Technology on specific indicators :**

Technology Assessed	**Performance indicators**						
	Average Plant height (cm))	**Number of primary branches per plant**	**Average fruit length (cm)**	**Average fruit width (cm)**	**Net Returns (Rs./ha)**	**Chilli Leaf Curl incidence (%)**	**Market price (Rs./Qtl)**
Farmers' practice: Cultivation of Private Hybrids	80.42	6.78	6.53	8.54	285978	13.46	2200
Alternate practice-1: Assessment of Arka Yashasvi Hybrid	92.87	10.25	6.55	8.47	362441	6.85	2200
Alternate practice-2: Assessment of Arka Tanvi Hybrid	83.23	8.13	6.93	8.13	418089	4.62	2500

3. **Specific Feedback from farmers**: Fruits of Arka Tanvi are long and thin with attractive dark green colour, less incidence of chiLCV and fruits are preferred in Gadag city market. Therefore farmers accepted Arka Tanvi Green Chilli Hybrid although it yielded lesser than Arka Yashashwsi hybrid

4. **Specific Feedback from Extension personnel and other stakeholders:** Fruits of Arka Tanvi are dark and thin, which are preferred in Gadag city market and Arka Tanvi is tolerant to ChiLCV disease compared to Arka Yashasvi and Pvt. Hybrid under assessment.

5. **Feedback to Research System based on results and feedback received :** Fruit colour of Arka Yashasvi is light compared to Arka Tanvi. The pungency level is mild compared to local varieties of Gadag District. There is need to develop dark coloured chilli fruits with slightly more pungent varieties/hybrids

6. **Feedback on usefulness and constraints of technology:** Fruits of Arka Tanvi are long and thin with attractive dark green colour and preferred in Gadag city market. Therefore farmers accepted Arka Tanvi Green Chilli Hybrid.

** Photographs are attached in JPEG format

4.C1.Results of Technologies Assessed

(V) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield	Unit of yield	Observations other than yield (Soil moisture content*(%d.b.))	Gross Return Rs. / unit	Net Return Rs. / unit	BC Ratio (Gross income/ Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13
Bengalgram	Protective irrigation	Non profitability due to moisture stress, deterioration of soil physical properties due to repeated use of machineries especially Rotavators& reduced water application efficiency	Assessment of conservation agriculture practice for higher productivity in Bengalgram preceeded with Maize crop	3	**T.O.1 (Farmers' practice):** Sowing of Bengalgram following conventional tillage (Rotavator operation twice and Harrowing) after the harvest of maize	-	13.63	q/ha	11.25	81780	58080	3.45
					T.O.2 : Sowing of Bengalgram after single pass blade harrow operation after harvest of maize with combine harvester	PAU, Ludhiana	14.25	q/ha	15.22	85500	63200	3.83
					T.O.3: Sowing of Bengalgram after single pass Rotavator operation after harvest of maize with combine harvester	PAU, Ludhiana	15.25	q/ha	16.34	91500	69700	4.19

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of conservation agriculture practice for higher productivity in Bengalgram preceeded with Maize crop	Conservation Agriculture practices in Bengalgram enhanced the yield and resulted in early germination of seeds. Soil water holding capacity was also improved.	Lack of knowledge to farmers regarding the technology

4.C3. Details of Successfully concluded technology assessment (support with necessary summary of data and photographs)

1. Title of Technology Assessed: Assessment of conservation agriculture practice for higher productivity in Bengalgram preceeded with Maize crop

2. Performance of the Technology on specific indicators

Technology Assessed	Performance indicators				
	Grain Yield (q/ha)	Net Returns (Rs./ha)	B.C. Ratio	Soil Moisture Content* (% d.b.)	Saving in cost of cultivation (%)
Farmer's practice: Sowing of Bengalgram following conventional tillage (Harrowing and rotavator operation twice) after the harvest of maize	13.63	58080	3.45	11.25	-
Recommended practice: Sowing of Bengalgram after single pass blade harrow operation after harvest of maize with combine harvester	14.25	63200	3.83	15.22	5.90
Alternate practice-1: Direct sowing of Bengalgram in cut and spread maize crop residue	15.25	69700	4.19	16.34	8.00

3.Specific Feedback from farmers: Conservation Agriculture practices in Bengalgram enhanced the yield and saved irrigation water significantly. Soil water holding capacity was also improved.

4.Specific Feedback from Extension personnel and other stakeholders: Conservation agriculture practices are well suited for irrigated condition and farmers may adopt the technology.

5. Feedback to Research System based on results and feedback received: Nil

6. Feedback on usefulness and constraints of technology

- The technology has to be adopted over a long period to obtain good results as building up of organic carbon takes time.

4.D1. Results of Technologies Refined : NIL

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Refined	Source of technology	Yield	Unit of yield	Observations other than yield	Gross Return Rs./unit	Net Return Rs. / unit	BC Ratio
1	2	3	4	5	6	7	8	9	10	11	12	13
					T.O.1 (Farmer practice)							
					T.O.2							
					T.O.3							

4. D2. Feedback on technologies refined

Name of technology refined	**Useful characters as well as constraints of technology**	**Socio-economic as well as administrative constraints for its adoption**

4.D.2. Details of Technologies refined:

1. Title of Technology Refined
2. Performance of the Technology on specific indicators
3. Specific Feedback from farmers
4. Specific Feedback from Extension personnel and other stakeholders
5. Feedback to Research System based on results/feedback received
6. Feedback on usefulness and constraints of technology

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
1	Oilseeds	Rainfed	Rabi 2023	Safflower	ISF-764		ICM	Demonstration of ICM practices in high yielding ISF-764 variety of Safflower	4	4	2	8	8	2
2		Rainfed	Summer 2023	Summer Groundnut			INM	Demonstration of INM in Summer Groundnut	2.4	2.4	1	5	5	1
3		Rainfed	Kharif	Soybean	KDS-753	-	Varietal demonstration	Demonstration of KDS-753 variety of Soybean crop	2	2	5	5	4	1
	Pulses													
4		Rainfed	Rabi	Bengalgram	JAKI-9218	-	ICM practices	Demonstration of ICM practices in JAKI-9218 variety of Bengalgram crop	10	10	2	23	20	5
5		Rainfed	Kharif	Greengram	DGGV-2	-	Varietal demonstration	Demonstration of DGGV-2 variety in Greengram crop	10	10	6	19	18	7
6		Rainfed	Kharif 2024-25	Blackgram	LBG-791	-	Varietal demonstration	Demonstration of LBG-791 variety of Blackgram	2	2	1	4	3	2
	Cereals													
7		Rainfed	Rabi 2023	Rabi Sorghum	SPV- 2217	-	Varietal demonstration	Demonstration of SPV-2217	8	8	0	20	15	5
	Millets													
8		Rainfed	Kharif, 2024	Foxtail Millet	HN-46		ICM in Foxtail Millet	Demonstration of ICM in HN-46 variety in Foxtail Millet	4.0	4.0	4	6	3	7

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
9		Rainfed	Kharif 2024	Pearl Millet	VPMV-9		Demonstration of Bio-fortified variety	Demonstration of bio-fortified Pearl Millet variety VPMV-9	2.0	2.0	0	5	1	4
	Vegetables													
10		Rainfed	Kharif 2024	Onion	Bheema Super	-	Varietal demonstration and ICM	Demonstration of ICM in Red onion variety Bheema Super	4.0	4.0	0	10	8	2
11		Rainfed	Kharif	Onion	Bheema Super	-	Farm Machineries	Demonstration of battery operated Onion detopper	-	-	4	6	7	3
12		Irrigated	Kharif 2024	Okra	-	Arka Nikita	Hybrid Varietal demonstration	ICM in Okra Hybrid variety Arka Nikita	1.2	1.2	1	5	5	1
	Flowers													
	Ornamental													
	Fruit													
	Spices and condiments													
13		Rainfed	Kharif 2023	Red chilli	Byadagi Dabbi	-	ICM in Byadgi Chilli	ICM in Byadgi Chilli	2.8	2.8	1	6	4	3
	Commercial													
14	Fodder	Irrigated	Kharif	Perennial fodder crops	Super Napier, Sorghum-COFS-31, Guinea grass, Rhodes grass, Signal grass: Lucerne, Stylo Hamata & Scabra & Sesbania	-	Nutrition Management in dairy animals	Demonstration on Fodder Production & feeding to milch animals for enhanced milk productivity	1	0.08	1	7	8	-

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
					grandiflora seeds & Fodder oats									
	Plantation													
	Fibre													
15	Dairy	Dairy animal	Kharif	Female calf	CB Cow		Nutrition	Feeding of calf starter with deworming in CB calves to attain early maturity	10	10	1	9	10	-
	Poultry													
	Rabbitry													
	Piggery													
16	Sheep and goat	Small Ruminant	Kharif	Goat kid	Non-descriptive breed (Local breed)	-	Nutrition management	Feeding of mineral mixture (Goatmin) with deworming to goat kid to gain body weight	10	10	2	8	10	-
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
17		Irrigated	Summer	Summer Groundnut	TMV-2	-	Farm Machineries	Demonstration of tractor operated Groundnut digger cum elevator	4	4	2	8	7	3
18		Rainfed	Rabi 2023	Bengalgram	JAKI-9218	-	Farm Machineries	Demonstration of tractor operated compartment bund former in Bengalgram crop	8	8	2	18	18	2
19		Irrigated	Rabi	Bengalgram	JAKI-9218	-	Farm Machineries	Demonstration of solar nipping machine in Bengalgram crop	4	4	2	8	8	2
20		Rainfed	Kharif	Greengram	DGGV-2	-	Farm Machineries	Demonstration of engine operated weeder in Greengram crop	4	4	3	7	10	0
	Others (specify)													
21	Nutri Garden	Irrigated & Rainfed	Kharif & Rabi	Vegetables	-	-	Nutrition	Demonstration of Nutri Garden	-	-	4	21	22	3
22	Grain storage			Greengram &Bengalgram	-	-	Grain storage	Demonstration of Super grain bags	-	-	5	35	40	0

5.A. 1. Soil fertility status of FLDs plots, if analysed

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1	Oilseeds	Rainfed	Rabi 2023	Safflower	ISF-764	-	ICM	Demonstration of ICM practices in high yielding ISF-764 variety of Safflower	Rabi 2023	L	M	M	Greengram
2		Rainfed	Summer 2023	Summer Groundnut	TMV-2		INM	Demonstration of INM in Summer Groundnut	Summer 2023	L	L	M	Maize
3		Rainfed	Summer 2023	Summer Groundnut	TMV-2		Farm Machinaries	Demonstration of tractor operated Groundnut digger cum elevator	Summer 2023	L	L	M	Maize
4		Rainfed	Rabi 2023	Soybean	KDS-753		Varietal demonstration	Demonstration of KDS-753 variety of Soybean crop	Rabi 2023				
	Pulses												
5		Rainfed	Rabi 2023	Bengalgram	JAKI-9218	-	ICM practices	Demonstration of ICM practices in JAKI-9218 variety of Bengalgram crop	Rabi 2023	L	M	M	Greengram
6		Rainfed	Rabi 2023	Bengalgram	JAKI-9218	-	Farm machinaries	Demonstration of tractor operated compartment bund former in Bengalgram crop	Rabi 2023	L	L	M	Greengram
7		Irrigated	Rabi	Bengalgram	JAKI-9218	-	Farm Machineries	Demonstration of solar nipping machine in Bengalgram crop	Rabi 2023				
8		Rainfed	Kharif	Greengram	DGGV-2	-	Varietal demonstration	Demonstration of DGGV-2 variety in Greengram crop	Kharif 2024				
9		Rainfed	Kharif	Greengram	DGGV-2	-	Farm Machineries	Demonstration of engine operated weeder in Greengramcrop	Kharif 2024				
10		Rainfed	Kharif 2024-25	Blackgram	LBG-791	-	Varietal demonstration	Demonstration of LBG-791 variety of Blackgram	Kharif 2024				
	Cereals												
11		Rainfed	Rabi 2023	Rabi Sorghum	SPV-2217	-	ICM	Demonstration of SPV-2217 variety	Rabi 2023	L	L	H	Greengram & fallow land
	Millets												
12		Rainfed	Khairf, 2024	Foxtail Millet	HN-46		ICM	Demonstration of ICM in HN-46 variety in Foxtail Millet	Kharif 2024	L	M	M	Spreading Groundnut

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
													& fallow land
13		Rainfed	Kharif 2024	Pearl Millet	VPMV-9		Varietal introduction	Demonstration of bio-foritified variety VPMV-9 of Pearl Millet	Kharif 2024	L	M	M	Spreading Groundnut & fallow land
14	Vegetables	Rainfed	Kharif 2024	Red Onion	Bheema Super	-	ICM practices	Demonstration of ICM in Red Onion variety Bheema Super	Kharif 2024	L	L	M	Chickpea
15		Rainfed	Kharif	Onion	-	-	Farm Machineries	Demonstration of battery operated Onion detopper	Kharif 2024	L	L	M	Chickpea
16		Irrigated	Kharif 2024	Okra	-	Arka Nikita	ICM practices	ICM in Okra Hybrid variety Arka Nikita	Kharif 2024				
	Flowers												
	Ornamental												
	Fruit												
	Spices and condiments												
17		Rainfed	Kharif 2024	Red chilli	Byadagi Dabbi	-	ICM in Byadgi Chilli	ICM in ByadgiChilli	Kharif 2024	L	L	M	Rabi Sorghum
	Commercial												
	Medicinal and aromatic												
18	Fodder	Irrigated	Kharif 2024	Perennial Fodder crops	Hybrid Napier-DHN 6, Multicut Jowar-VH-988, Guinea grass, Rhodes grass, Signal grass: Lucerne, Stylosanthes Hamata 555	-	Nutrition Management in dairy animals	Demonstration on Fodder Production	Kharif 2024	L	L	M	Maize

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
					&StyloScabra seeds, Subabul K8/B-42 & Sesbania grandiflora & Fodder oats								
	Plantation												
	Fibre												
	Sericulture												

5.B. Results of FLDs

5.B.1. Crops

Crop name	Name of the technology demonstrated	Variety	Thematic Area	No. of Demo.	Area (ha)	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of Check (Rs./ha)			
						Demo	Check		COC	Gross Return	Net Return	BCR	COC	Gross Return	Net Return	BCR
Safflower	Demonstration of ICM practices ISF-764 variety in Safflower	ISF-764	ICM	10	4	8.51	6.64	28.00	17817	38306	20489	2.15	17070	29869	12799	1.75
Summer Groundnut	Demonstration of INM in Summer Groundnut	TMV-2	INM	6	2.4	16.15	13.13	23.00	33167	72656	39490	2.19	30804	59063	28258	1.92
Soybean	Demonstration of KDS-753 variety in Soybean	KDS-753	Varietal demonstration	5	2	15.38	11.05	39.14	31075	66134	35059	2.13	31375	47515	16140	1.51
Greengram	Demonstration of DGGV-2 variety in Greengram crop	DGGV-2	Varietal demonstration	25	10	11.30	8.25	36.97	28350	84185	55835	2.97	25450	61463	36013	2.41

Crop name	Name of the technology demonstrated	Variety	Thematic Area	No. of Demo.	Area (ha)	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of Check (Rs./ha)			
						Demo	Check		COC	Gross Return	Net Return	BCR	COC	Gross Return	Net Return	BCR
Bengalgram	Demonstration JAKI-9218 variety in Bengalgram crop	JAKI-9218	Varietal demonstration	25	10	14.20	11.50	23.85	23911	82331	58420	3.44	21225	66845	45620	3.14
Blackgram	Demonstration of LBG-791 variety of Blackgram	LBG-791	Varietal demonstration	10	4	5.50	3.76	35.10	22563	38063	15537	1.69	19900	28219	8300	1.42
Rabi Sorghum	Demonstration of SPV-2217 variety	SPV-2217	Varietal demonstration	20	8	17.98	13.80	30.28	17085	73723	56638	4.31	15368	56580	41212	3.68
Foxtail Millet	Demonstration of ICM in HN-46 variety of Foxtail Millet	HN-46	Varietal demonstration	10	4.0	14.14	8.75	61.60	16313	42413	26100	1.67	15719	26250	10531	2.60
Pearl Millet	Demonstration of Bio-fortified VPMV-9 variety of Bajra crop	VPMV-9	Varietal demonstration	5	2.0	16.28	10.68	52.43	18000	40688	22688	2.26	17325	26688	9363	1.46
Red Onion	ICM in Red onion variety Bheema Super	Bheema Super	Varietal demonstration and ICM	10	4.0	83.25	63.48	31.15	41943	303863	261920	7.33	35793	184078	148285	5.20
Dry Chilli	ICM in ByadgiChilli	Rudra	Varietal demonstration and ICM	07	2.8	9.61	7.63	25.93	61196	211408	150212	3.45	56993	167875	110882	2.95

** BCR= GROSS RETURN/GROSS COST
H – Highest Yield, L – Lowest Yield A – Average Yield

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/diseases etc.)

1. Demonstration of DGGV 2 variety in Greengram crop

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
No. of pods per plant	33.18	26.22
Plant height (cm)	44.58	37.25

2. Demonstration of KDS-753 variety in Soybean crop

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
No. of pods per plant	46.87	32.10
Plant height (cm)	48.33	37.25

4. Demonstration of SPV-2217 variety in Rabi Sorghum

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demonstration plot**	**Local check plot**
Lodging of plants (Percentage) at harvest	2.12	9.16
Plant height (cm)	217	196

5. Data on additional parameters other than yield :FLD on ICM in Onion variety Bhima Super

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Average Fresh Bulb weight (g)	117.96	101.74
Thrips incidence (No.s/ plant)	0.4	1.4

6. Data on additional parameters other than yield :FLD on ICM in Red Chilli variety Rudra

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Average Fresh Fruit weight (g)	12.62	11.25
Incidence of Chilli Leaf Curl Virus (ChiLCV) (%)	8.21	10.41
Incidence of Anthracnose (%)	9.23	11.48

Feedback on technologies demonstrated

Name of technology demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Demonstration of DGGV 2 variety in Greengram crop	The variety demonstrated is high yielding, taller in stature and resistant to pod shattering which makes it suitable for mechanical harvesting	Non availability of seeds on larger scale
Demonstration of KDS-753 variety in Soybean crop	The demonstrated variety is high yielding and resistant to rust disease. Number of pods per plant were more in demonstrated variety compared to local variety	• Non availability of seeds on larger scale Less market price

Name of technology demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Demonstration of SPV-2217 variety in Rabi Sorghum	Variety is comparatively lodging resistant besides having higher productivity	-
Demonstration of ICM in Red onion variety Bheema Super	**Bheema Super** • Bulb weight and quality is superior • Attractive pink bulbs fetch better market price (Rs. 750-800/q more) compared to local variety • Low incidence of thripsand purple blotch compared to local variety Application of Gypsum helped in less bulb rotting compared to local varieties • Application of Arka Vegetable Special helped to get large and dark pink coloured bulbs.	**-**
ICM in ByadgiChilli	• Pure seeds of Byadagi Dabbi (Rudra variety) supplied to farmers are very good, farmers saved the seeds for next season • Foliar spray of *Lecanicilliumlecanii* and *Beauveria bassiana* resulted in reduction in incidence of thrips and mite population • Maize as border crop and Marigold as trap crop resulted in less incidence of sucking pest and fruit borer respectively • Application of Arka Vegetable Special (Micro nutrient mixture) resulted in better flower and fruit set and dark red coloured fruits • Timely management of Fruit rot resulted in better fruit yield and quality	**-**

5. B2. Data on IFS demonstrations including KVK farm demo model

Name of the IFS technology demonstrated	Name of IFS Components				Total Area (ha)	IFS Yield (q/ha)				Check yield (Mono crop)	% Increase over check	Economics of IFS demonstration (Rs./ha)			Economics of check demonstration (Rs./ha)		
	1	2	3	4		Component wise (Mention name of component and yield parameter)						Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
						1	2	3	4								

Feedback on IFS technologies demonstrated

Name of IFS technology demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption

5.B.3. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Name of the parameter with unit	Major parameters		% Increase	*Economics of demonstration Rs./unit)			*Economics of check (Rs./unit)		
						Demo	Check		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
Dairy	Demonstration on Fodder Production& feeding to cows for higher milk productivity	CB Cows	8	8	Milk yield / Cow / Lactation	8.82	7.62	15.74	72495	44139	8.82	61762	22881	7.62
Poultry														
Rabbitry														
Pigerry														
Sheep and goat	Demonstration of feeding of mineral mixture (Goatmin) with deworming to goat kids to enhance body weight gain	Kid	10	10	Body weight gain/Kid (Kg)	16.62	13.4	24.02	7977	6967	7.89	5600	5790	6.91
Duckery														
Others (pl.specify)														

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

FLD on Fodder production

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

Data on additional parameters : Demonstration on Fodder production

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demonstration**	**Check**
Feeding of Fodder	• Increase in intake of dry fodder • Gradual improvement in the general condition of the animal health • Cows are coming to heat within the period	-
Nutrition	30 Kg green fodder, 10 Kg dry fodder and 2 Kg concentrated feed / Cow / day	No systematic nutrition

5. B4. Feedback on livestock technologies demonstrated

Name of livestock technology demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
FLD on Fodder production	After production and feeding of perennial green fodder, and grasses to milking cow, there was •Enhanced intake of fodder •Increased Milk production •Improvement in health condition and reducedcost of cattle feed	-

5.B.5. Fisheries : NIL

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m^2)	Name of the pararmeter with unit	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit) or (Rs./m2)			*Economics of check Rs./unit) or (Rs./m2)		
						Demo			Check if any		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
						H	L	A								
Common carps																
Mussels																
Ornamental fishes																

Others (pl.specify)																

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check if any**

5. B6. Feedback on fisheries technologies demonstrated

Name of fisheries technology demonstrated	**Useful characters as well as constraints of technology**	**Socio-economic as well as administrative constraints for its adoption**

5.B.7. Other enterprises

Enterprise	**Name of the technology demonstrated**	**Variety/ species**	**No. of Demo**	**Units/ Area {m^2}**	**Name of the parameter with unit**	**Major parameters**		**% Increase**	***Economics of demonstration (Rs./unit) or (Rs./m2)**			***Economics of check (Rs./unit) or (Rs./m2)**		
						Demo	**Check**		**Gross Return**	**Net Return**	**** BCR**	**Gross Return**	**Net Return**	**** BCR**
Oyster mushroom														
Button mushroom														
Vermicompost														
Sericulture														

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Name of the parameter with unit	Major parameters		% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)			*Economics of check (Rs./unit) or (Rs./m2)		
						Demo	Check		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
Apiculture														
Others (pl. specify)														
Nutrition & Health	Demonstration of Nutri Garden	-	25	3966.3 Sq.mts	• Amount spent towards purchase of vegetables/year • Percentage adequacy of vegetables • Availability of leafy vegetables, other vegetables and roots and tubers per day/ member	-	-	-	87730	63130	3.57	-	-	-
Post Harvest Technology														
Grain Storage	Demonstration of Super Grain Bags	Greengram-DGGV-2	40		• No. of live insects per Kg (Nos./Kg) • Weight loss of grains (Kgs) • Percentage weight loss of grains (%)	-	-	-	-	-	-	-	-	-

Data on additional parameters other than yield :Nutri Garden

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Amount spent towards purchase of vegetables/year	Rs.4800 (Rs.400/month)	24000 (Rs.2000/month)
Percentage adequacy of vegetables	70 %	-
Production of vegetables per month / family	25.03 Kg	-
Consumption of vegetables per family per month	28.20 Kg	16.10 Kg
Consumption of vegetables per person per day	235 gms	133.80 gms

Data on additional parameters other than yield :Demonstration of Super Grain Bags

Data on other parameters in relation to technology demonstrated		
	Greengram (40 Demo)	
Parameter with unit	**Demo**	**Local**
No. of live insects / Kg (Nos.)	0	3
Initial weight of grains (Kg)	50 Kg	50 Kg
Final weight of grains (Kg)	49.10	45.53
Weight loss of grains / 50 Kg (Kg)	0.84	4.47
Weight loss of grains (%)	1.68	8.94

5. B8. Feedback on enterprises demonstrated

Name of enterprise demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Nutrition Garden	**Useful characters :** • Fresh vegetables were available to families • Cost incurred for purchase of vegetables has been reduced • All family members including children came to know about the cultivation of various vegetables • Exchange of vegetables with neighbors and friends **Constraints** : • Water problem • Management of pest and diseases	**Socio-economic constraints** • Due to small land holding, many families may show dis-interest in cultivation of vegetables in smaller quantity • Lack of resources • Fencing problem • Damage of Nutri-Garden occurs due to stray cattles and livestock **Administrative constraints** • Nil

Name of enterprise demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Grain storage	**Useful characters :** • Storage is easy • No pest incidence	**Socio-economic constraints** • Cost is more

5.B.9. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Name of the operation with unit	Labour requirement in Man days		% save	Savings in labour (Rs./ha)	*Economics ofdemonstration (Rs./ha)			*Economics of check (Rs./ha)		
						Demo	Check			Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
Groundnut Digger cum Elevator	85000	Demonstration of Tractor operated Groundnut Digger Cum Elevator	10	4	Groundnut harvesting	1.05	7.5	86.00	1696	-	-	-	-	-	-
Compartment Bund Former	55000	Demonstration of Tractor operated compartmental bund former	20	8	Compartmental Bunding	0.34	1.67	79.64	335	71238	49138	3.22	67416	44416	2.93
Solar nipping machine	10500	Demonstration of Solar nipping machine in Bengalgram	10	4	Nipping	1.4	5	72	2100	92300	68800	3.92	83250	60750	3.70
Engine operated weeder	18000	Demonstration of Engine operated weeder in Greengram crop	10	4	Weeding	2.5	13.13	80.95	2183	-	-	-	-	-	-
Onion Detopper	3500	Demonstration of Battery Operated Onion Detopper	10	-	Detopping of Onions	1.33	2.04	34.80	-	-	-	-	-	-	-

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= Gross Return/Gross Cost

Data on additional parameters other than labour saved (viz., reduction in drudgery, time etc.)

i. Demonstration of Tractor operated Groundnut Digger Cum Elevator

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Area coverage (ha/h)	0.38	0.06
Saving in Time of operation (%)	84.22	-
Digging efficiency (%)	94.45	99.50
Pod damage (%)	0.46	0.21

ii. Demonstration of Tractor Operated Compartmental Bund Former for in-situ Moisture Conservation

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Average Soil Moisture content (% d.b)	29.83	20.56
Area coverage (ha/h)	0.36	-

iii. Demonstration Solar Nipping Machine in Bengalgram

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Number of pods per plant	53	62
Number of branches per plant	16	21
Area coverage (ha/h)	0.06	0.03

iv. Demonstration of Engine Operated Weeder in Greengram Crop

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Area coverage (ha/h)	0.05	0.02
Weeding efficiency (%)	86	97
Saving in Time of operation (%)	60	-

v. Demonstration of Battery Operated Onion Detopper

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
Rate of detopping (kg/h)	182	105
Saving in Time of operation (%)	34.72	-

5. B10. Feedback on farm implements demonstrated.

Name of farm implement demonstrated	**Useful characters as well as constraints of technology**	**Socio-economic as well as administrative constraints for its adoption**
Tractor Operated Groundnut	• The equipment performs uprooting, elevating and	• It requires a skilled tractor operator for efficient

Name of farm implement demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Digger cum Elevator	windrowing of groundnut plants • It can reduce the drudgery of operation involved in manual uprooting and collection of plants in traditional method • Requires periodic clearing of entangled plants while in operation	operation • Since the equipment is operation and crop specific, farmers show less interest to purchase the equipment
Tractor operated compartmental bund former	• Compartmental Bunding helps in conservation of soil moisture for getting higher yield. • Can be used for rain water harvesting during kharif and rabi seasons.	• Lack of awareness in farmers towards benefits of in-situ moisture conservation technologies. • Tractor operated compartmental bund former is single operation equipment. Hence farmers are reluctant in investing on purchase of the equipment.
Solar nipping machine	• Solar nipping machine works effectively for nipping of chickpea. • There is no need of special skills to operate this machine	• Lack of interest in farmers towards nipping operation in chickpea
Engine Operated Weeder in Greengram	• Suitable for small and marginal farmers • Can be used for multiple field crops • Can only cover one row for weeding • Requires periodical maintenance of engine parts	• Lack of interest in purchase of equipment owing to fuel (petrol) cost
Battery Operated Onion Detopper	• Battery operated Onion Detopper resulted in reduction of drudgery involved in manual detopping method. • There was significant saving in labour requirement and time of operation.	• Since the detopping of onion is done mostly by the women labour, the ergonomic design of machine can be improved.

5.B.11.Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	10	469	-
2	Farmers Training	62	1793	-
3	Media coverage	12	-	-
4	Training for extension functionaries	9	364	-
5	Others (Please specify)			

5. C. Women and children empowerment programme conducted

Category	Name of the programme	No of programmes	No of Participants
Women	Awareness programmes	10	820
	Coconut tree climbing	-	-
	Drudgery Reduction	8	252
	Enterprises	4	168
	Farming System	5	185
	Health and nutrition	4	135
	Kitchen Garden	-	-

	Nutrigarden	9	360
	Storage Technique	2	85
	Value addition	3	95
	Women Empowerment	2	65
	Others		
	Total	**47**	**2165**
Children	Health	6	325
	Others		
	Total	**6**	**325**
Grand Total		**53**	**2490**

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

6.1 Demonstration details on crop hybrids

Crop name	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
				Demo	Check		COC	Gross Return	Net Return	** BCR	COC	Gross Return	Net Return	** BCR
Okra	Arka Nikita	6	2.4	168.15	139.90	20.19	83479	285848	202369	3.42	76904	237830	160926	3.09
Total														

*Please ensure that the name of the hybrid is correct pertaining to the crop specified

6.2 Feedback on crop hybrids demonstrated

Name of crop hybrid demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Arka Nikita	High yielder, moderately tolerant to YVMV disease, fruits have demand in the market with good coocking quality	-

PART VII. TRAINING

7.A. Training of Farmers and Farm Women including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	4	74	27	101	40	0	40	114	27	141
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Natural Farming	1	0	58	58	0	3	3	0	61	61
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
Bio-rationals in pest and disease management	1	0	0	0	26	4	30	26	4	30
b) Fruits										
Training and Pruning	1	52	0	52	10	0	10	62	0	62
Layout and Management of Orchards	1	35	0	35	7	0	7	42	0	42
Cultivation of Fruit										
Management of young plants/orchards	1	18	0	18	7	0	7	25	0	25
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Plant propagation techniques										
Others (pl.specify)										
Integrated Horticulture System										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
Strategies for management of physiological disorders in coconut palms										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology in Ashwagandha crop										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	20	0	20	6	0	6	26	0	26
Integrated water management										
Integrated nutrient management										
Production and use of										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
organic inputs										
Management of Problematic soils	2	93	0	93	7	0	7	100	0	100
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	18	18	0	0	0	0	18	18
Design and development of low/minimum cost diet	2	10	9	19	0	14	14	10	23	33
Designing and development for high nutrient efficiency diet	2	55	0	55	0	25	25	55	25	80
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	5	9	84	93	8	33	41	17	117	134
Women empowerment	1	2	11	13	0	2	2	2	13	15
Location specific drudgery reduction										
Rural Crafts										
Women and child care										
Others (pl.specify)										
EDP for women										
Personal hygeiene, nutrition										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
& pipe composting										
Agril. Engineering										
Farm machinery and its maintenance	4	124	9	133	40	5	45	164	14	178
Installation and maintenance of micro irrigation systems	1	0	26	26	0	4	4	0	30	30
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Others (pl.specify)										
Mechanisation in straw management										
Energy efficient pumps and water conservation										
Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming	1	0	0	0	0	95	95	0	95	95
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl. specify)										
Farmers' Producer Organisation										
Agro-forestry										
Production technologies	1	40	34	74	14	12	26	54	46	100
Nursery management										
Integrated Farming Systems	2	0	0	0	25	15	40	25	15	40
Others (Pl. specify)										
TOTAL	**32**	**532**	**276**	**808**	**190**	**212**	**402**	**722**	**488**	**1210**

7.B Training of Farmers and Farm Women including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies	1	7	0	7	18	0	18	25	0	25
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	3	26	24	50	4	5	9	30	29	59
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Natural farming										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables	3	38	6	44	32	0	32	70	6	76
Nursery raising										
Exotic vegetables	1	0	0	0	20	17	37	20	17	37
Export potential vegetables	1	28	0	28	13	0	13	41	0	41
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
IPDM in White Onion										
Vegetable cultivation										
Post harvest management of Onion										
ICM in vegetable crops	2	68	0	68	23	12	35	91	12	103
Plant Protection	1	0	0	0	13	6	19	13	6	19
INM in vegetable crops										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	18	4	22	6	0	6	24	4	28
Cultivation of Fruit	2	12	14	26	25	3	28	37	17	54
Management of young plants/orchards	1	53	2	55	4	3	7	57	5	62

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants	1	14	4	18	10	0	10	24	4	28
Others (pl.specify)										
d) Plantation crops										
Production and Management technology	2	9	0	9	43	0	43	52	0	52
Processing and value addition										
Others (pl.specify)										
Plant protection measures	1	4	0	4	21	0	21	25	0	25
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology	3	48	2	50	23	0	23	71	2	73
Processing and value addition	1	5	0	5	18	2	20	23	2	25
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	42	4	46	12	4	16	54	8	62
Integrated water management										
Integrated nutrient management										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing	1	33	0	33	2	0	2	35	0	35
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	1	23	3	26	7	5	12	30	8	38
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	4	24	40	64	4	8	12	28	48	76
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	2	36	43	79	14	19	33	50	62	112
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	2	24	20	44	7	4	11	31	24	55
Value addition	2	7	63	70	0	8	8	7	71	78
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
EDP for women										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Farm machinery and its maintenance	4	100	3	103	53	5	58	153	8	161
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	2	34	9	43	5	2	7	39	11	50
Others (pl.specify)										
Operation of solar nipping machine										
Conservation in agriculture practices										
Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Integrated pest and disease management										
Organic farming										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**43**	**653**	**241**	**894**	**377**	**103**	**480**	**1030**	**344**	**1374**

7.C. Training for Rural Youths including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	1	0	0	0	25	0	25	25	0	25
Training and pruning of orchards	1	0	0	0	25	0	25	25	0	25
Protected cultivation of vegetable crops										
Commercial fruit production	1	0	0	0	25	0	25	25	0	25
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	23	12	35	3	1	4	26	13	39
Value addition										
Small scale processing										
Post Harvest Technology	1	38	1	39	1	0	1	39	1	40
Tailoring and Stitching	2	3	16	19	0	20	20	3	36	39
Rural Crafts										
Production of quality animal products										
Dairying	6	54	29	83	32	7	39	86	36	122
Sheep and goat rearing	3	54	8	62	14	5	19	68	13	81
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	15	1	16	4	0	4	19	1	20
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
CCINM	1	38	0	38	2	0	2	40	0	40
TOTAL	**18**	**225**	**67**	**292**	**131**	**33**	**164**	**356**	**100**	**456**

7.D. Training for Rural Youths including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	39	0	39	6	0	6	45	0	45
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
ICT in agriculture										
TOTAL	**1**	**39**	**0**	**39**	**6**	**0**	**6**	**45**	**0**	**45**

7.E. Training programmes for Extension Personnel including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	2	0	47	47	0	11	11	0	58	58
Integrated Pest Management										
Integrated Nutrient management	1	37	0	37	3	0	3	40	0	40
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs	5	0	132	132	0	21	21	0	153	153
Care and maintenance of farm machinery and implements	3	12	54	66	2	6	8	14	60	74
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	1	0	23	23	0	6	6	0	29	29
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals	4	81	45	126	0	19	19	81	64	145
Livestock feed and fodder production	3	35	16	51	0	27	27	35	43	78
Household food security										
Any other (pl.specify)										
Value addition										
Soil fertility management	1	37	0	37	3	0	3	40	0	40
Soil & water testing	2	0	102	102	0	10	10	0	112	112
Total	**22**	**202**	**419**	**621**	**8**	**100**	**108**	**210**	**519**	**729**

7.F. Training programmes for Extension Personnel including sponsored training programmes (off campus) :

NIL

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Good food & nutrition garden										
Any other (pl.specify)										
Entrepreneurship development										
Women empowerment										
Total										

7.G. Sponsored training programmes conducted

S. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	6	115	81	196	19	23	42	134	104	238
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants	2	18	0	18	32	0	32	50	0	50
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**	2	93	0	93	7	0	7	100	0	100
4	**Production of Inputs at site**	5	0	132	132	0	21	21	0	153	153
5	**Methods of protective cultivation**	1	0	0	0	25	0	25	25	0	25
6	**Others (pl.specify)**										
	Training and pruning of orchards	1	0	0	0	25	0	25	25	0	25
	Bio-rationals in horticulture crops	1	0	0	0	26	4	30	26	4	30
	Soil and water testing	2	0	102	102	0	10	10	0	112	112
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition	2	6	60	66	0	16	16	6	76	82
7.b.	Others (pl.specify)										
	Storage loss minimization techniques										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements	6	123	75	198	11	12	23	134	87	221
8.b.	Others (pl.specify)										
	Installation and maintenance of MIS	1	0	26	26	0	4	4	0	30	30
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management	3	35	16	51	0	27	27	35	43	78
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management	1	0	0	0	95	0	95	95	0	95
10.e.	Others (pl.specify)										
	Scientific dairy management	5	61	23	84	25	10	35	86	33	119
	Poultry management	1	15	1	16	4	0	4	19	1	20
	Scientific management of sheep & goat	2	28	7	35	16	2	18	44	9	53
	Management in farm animals	3	30	36	66	0	19	19	30	55	85
11.	**Home Science**										
11.a.	Household nutritional security	1	24	35	59	8	9	17	32	44	76
11.b.	Economic empowerment of	1	2	11	13	0	2	2	2	13	15

S. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
	women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
	Tailoring & stitching	2	3	16	19	0	20	20	3	36	39
	Women and child care	1	0	23	23	0	6	6	0	29	29
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Installation & maintenance of MIS										
	Organic farming practice										
	Natural farming										
	ICT in agriculture										
	Total	**49**	**553**	**644**	**1197**	**293**	**185**	**478**	**846**	**829**	**1675**

Details of sponsoring agencies involved

i) Dept of Animal Husbandry and Veterinary Sciences
ii) ATMA
iii) PCRA
iv) SBI-ASF RSETI, Hulkoti
v) SCSP
vi) SKDRDP
vii) Department of health and family welfare
viii) Zilla Panchayat
ix) CADA
x) KSRLPS
xi) MANAGE, Hyderabad
xii) UAS, Dharwad
xiii) NAARM, Hyderabad
xiv) KREDL, Bengaluru
xv) DCR, Puttur
xvi) CIAH, Bengaluru

7.H. Details of Vocational Training Programmes carried out by KVKs for rural youth

Sl. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production	**1**	**0**	**0**	**0**	**25**	**0**	**25**	**25**	**0**	**25**
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
	Integrated Nutrient Management	**1**	**38**	**0**	**38**	**2**	**0**	**2**	**40**	**0**	**40**
	Nursery management in horticulture crops	**1**	**0**	**0**		**25**	**0**	**25**	**25**	**0**	**25**
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl.specify)										
	Post harvest technology	**1**	**38**	**1**	**39**	**1**	**0**	**1**	**39**	**1**	**40**
3.	**Livestock and fisheries**										
3.a.	Dairy farming	4	38	20	58	18	5	23	**56**	**25**	**81**
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing	2	28	7	35	16	2	18	**44**	**9**	**53**
3.d.	Piggery										
3.e.	Poultry farming	1	15	1	16	4	0	4	**19**	**1**	**20**
3.f.	Others (pl.specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements	**1**	**39**	**0**	**39**	**6**	**0**	**6**	**45**	**0**	**45**
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.	2	3	16	19	0	20	20	**3**	**36**	**39**
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	ICT in agriculture										
	Grand Total	**14**	**199**	**45**	**244**	**97**	**27**	**124**	**296**	**72**	**368**

7.I. Details of Skill Training Programmes carried out by KVKs under ASCI : NIL

S. No.	Name of Job Role	Date of Start	Date of Assessment	Total Expenditure (Rs.)	No. of Participants									No of Participants passed assessment
					General			SC/ST			Grand Total			
					Male	Female	Total	Male	Female	Total	Male	Female	Total	

PART VIII – EXTENSION ACTIVITIES

8.1 Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	11	181	51	232	135	28	163	5	9	14
Kisan Mela	-			0			0			0
Kisan Ghosthi	1	70	25	95	21	3	24	9	1	10
Exhibition	3	11795	8475	20270	0	0	0	22	18	40
Film Show	15	216	67	283	101	7	108	17	16	33
Method Demonstrations	10	153	101	254	53	24	77	8	14	22
Farmers Seminar	2	135	108	243	55	16	71	7	4	11
Workshop				0			0			0
Group meetings	9	111	19	130	59	20	79	12	17	29
Lectures delivered as resource persons	13	379	184	563	47	17	64	46	7	53
Advisory Services	53	45	8	53	0	0	0	0	0	0
Scientific visit to farmers field	91	853	116	969	44	2	46	54	54	108
Farmers visit to KVK	107	337	65	402	0	0	0	12	8	20
Diagnostic visits	9	53	3	56	3	1	4	18	7	25
Exposure visits	4	114	7	121	4	3	7	5	4	9
Soil health Camp	1	65	0	65	0	0	0	2	0	2
Animal Health Camp				0			0			0
Soil test campaigns	1	15	25	40	9	7	16	2	1	3
Celebration of important days (specify)				0			0			0
International Women's Day	1	5	51	56	0	5	5	2	3	5
World food day	1	25	55	80	14	8	22	1	1	2
World soil day	1	88	38	126	0	0	0	3	2	5
Kisan Diwas	1	60	30	90	25	21	46	6	6	12
Mahila Kisan Diwas	1	0	75	75	0	35	35	3	3	6
World environment	1	50	30	80	10	5	15	2	0	2

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
day										
Earth day	1	5	61	66	0	6	6	2	2	4
Parthenium awareness programme	2	30	12	42	0	0	0	2	1	3
Special day celebrations				0			0			0
Torch receiving ceremony	1	58	30	88	25	40	65	10	5	15
Plantation	3	20	17	37	0	0	0	2	3	5
Swachhata Pakhawada & Special campaign 4.0	39	364	98	462	18	20	38	30	28	58
Swachhata hi sewa	16	295	92	387	25	18	43	50	40	90
Total	**398**	**15522**	**9843**	**25365**	**648**	**286**	**934**	**332**	**254**	**586**

8.2 Other extension activities like print and electronic media etc.

Sl. No.	Type of media/activity	Number of activities/Number
1	Popular articles	18
2	Newspaper coverage	24
3	Extension Literature	2
4	Radio Talks	180
5	TV Talks	-
6	CD/DVD/Video clips	6
7	Animal health camps (no. of animal treated)	-
8	Others, please specify	-
	Total	**230**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Rabi Jowar	SPV-2217	1.65	16500	55
		M.35-1	0.15	1500	5
		BJV-44	0.15	1500	5
	Foxtailmillet	HN-46	0.90	13500	30
	Pearlmillet	VPMV-9	0.75	10500	25
Oilseeds	Safflower	ISF-764	8.12	81200	51
		A-2020	4.15	41500	10
		DASF-1	0.12	1200	3
Pulses	Bengalgram	JAKI-9218	13.64	102288	45
	Bengalgram	Phule Vikram	1.0	10000	5
	Bengalgram	NBeG-49	1.0	10000	5
	Bengalgram	DBGV-204	1.0	10000	5
	Greengram	DGGV-2	4.25	84320	70
		DGGV-7	0.15	3000	3
	Redgram	TS-3R	1.58	32500	46
	Blackgram	LBG-791	1.12	16800	16
	Cowpea	DC-15	1.0	18000	10
Commercial crops					
Vegetables	Onion	Bhima super	1.09	155600	53
	Chilli	Byadgidabbi	0.07	24500	7
Flower crops					
Spices	Ajwain	AA-1	0.05	3750	5
		AA-73	0.05	3750	5
Fodder crop seeds	Sorghum Multi-cut	COFS-31	19.2 Kg	18432	2
	Fodder Cowpea		6.00 Kg	864	2
	Stylo haemata		1.8 Kg	864	2
	Stylo scabra		1.8 Kg	864	2
	Lucerne		2.4 Kg	2304	2
	Sesbenia grandiflora		1.2 Kg	720	2
	Fodder Oats		96.0 Kg	11104	2
Fiber crops					
Forest Species					
Others (specify)					
Total			**43.27**	**676970**	**466**

9.B. Production of hybrid seeds by the KVKs: Nil

Crop category	Name of the crop	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided

9.C. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Number	Value (Rs.)	Number of farmers to whom provided
Commercial					
Vegetable seedlings	Drumstick	Bhagya	320	6750	22
Fruits	Mango	Alphanso	50	7500	2
	Jackfruit	Siddu	105	35000	10
	Jamun	AJG-85	50	7500	4
	Guava	Lucknow-49	160	14100	12
	Custard apple	Balnagar	50	6000	8
	Lime	Balaji	150	16500	8
	Papaya	Red lady	75	3750	15
Ornamental plants					
Medicinal and Aromatic					
Plantation	Cashewnut	Vengurla-4	1780	15000	8
	Coconut	Ganga bondam	150	50000	25
Spices	Curryleaf	Suhashini	275	9400	20
Tuber					
Fodder crop saplings	Guiniea grass		3600	4320	3
	Congo signal		5100	6120	3
	Rhodes grass		4500	5400	3
	Super Napier		4800	9680	3
Forest Species					
Others(specify)					
Total			**21165**	**197020**	**146**

9.D. Production of hybrid planting materials by the KVKs

Crop category	Name of the crop	Name of the Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Vegetable seedlings	Chilli	Arka janvi	15000	15000	5
	Chilli	Arka yashasvi	15000	15000	5
		Total	30000	30000	

9.E. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Vermiwash	250 lit	10000	27
	Vermicompost	140 Qtl	56000	42
	Rhizobium	57. 0 kg	5700	75
	PSB	100.0 kg	10050	71
	Azospirillum	10.0 kg	1000	50
Bio-pesticide				
Bio-fungicide	Trichoderma	13.0 kg	2600	75
Bio Agents	Earthworms	25.0 kg	7500	19
Others (specify)	Azolla	5.0 Kg	500	7
Total		**14460**	**93350**	**366**

9.F. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes	Surti cross	01	29000	1
Calves				
Others (Pl. specify) Buck				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total		**01**	**29000**	**1**

PART X – PUBLICATION, SUCCESS STORY, INNOVATIVE MTHODOLOGY, ITK, TECHNOLOGY WEEK

10. A. Literature Published

(i) Summary of published

Item	Number
Research papers- International	0
Research papers- National	2
Technical reports	0
Technical bulletins	4
Popular articles - English	1
Popular articles – Local language	17
Extension literature	2
Others (Pl. specify)	
TOTAL	**26**

(ii) Details of Literature published (Provide details only on Research articles and Technical Reports)

Please provide the details of above publication in the following format:

1. Research articles in journals:

Sudha V Mankani, Vinayaka H Niranjan, N.H.Bhandi and Hemavati R Hiregoudar (2024) PerformanceEvaluation of Solar Dryers for Drying of Red Chilli (Capsicum annuum). *Environment and Ecology* (Accepted for publication)

2.Technical Reports/ bulletins: Authors name, Title of the technical report, name of publishing KVK, number of pages.

KVK Scientists, (January-March, 2024) Krishi Vigyan Patrike, Volume-12, Issue-4, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 9p.

KVK Scientists, (April-June, 2024) Krishi Vigyan Patrike, Volume-13, Issue-1, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 10p.

KVK Scientists, (July-September, 2024) Krishi Vigyan Patrike, Volume-13, Issue-2, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 8p.

KVK Scientists, (October-December, 2024) Krishi Vigyan Patrike, Volume-13, Issue-3, ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, 13p.

10.B. Details of Electronic Media Produced

Sl. No.	Type of media	Title	Details
1	CD / DVD	ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, Gadag	A brief video on the activities of ICAR-K.H.Patil Krishi Vigyan Kendra and its achievements
		Natural farming Progressive Farmer's Success Story	A video on the success story of Shri Basavaraj Navi, Progressive farmer practicing natural farming.
		Jamun fruit	Under Kisan Samriddhi Productions-Sahakar Radio Gadag, made video on importance and uses of Jamun fruit
		2nd Phase planting of trees, ICAR-Foundation day - ICAR-KVK, Gadag	Video on Planting of trees on the occasion of Foundation day of ICAR
		DFI	Video on falicitation of DFI farmers
2	Mobile Apps	-	-

Sl. No.	Type of media	Title	Details
3	Social media groups with KVK as Admin	WhatsApp – • KVK, HULKOTI, GADAG group • Cashew Growers group • Mango Growers group • GADAG FPOs • Nutri-Garden farmers • Dairy entrepreneurs : KVK • Chilli growers	3076 members
4	Facebook account name	KhpKvkHulkoti	545 followers
5	Instagram account name	KVKGadag	109 followers
6	Twitter Account	ICAR-KVK Gadag	76 followers
7	Youtube Account	K.H.Patil Krishi Vigyan Kendra Hulkoti	4800 subscribers

10.C. Success Stories / Case studies

1) NEW VARIETY OF SOYBEAN BRINGING PROSPERITY

BACKGROUND

Gadag being a drought prone District has very limited options for field crop selection. Majority of the farmers prefer to grow Greengram, Maize and Groundnut crops during *kharif* season. Due to inconsistent rains, these crops are not much remunerative. Area under soybean crop is negligible in the District. It is one of the field crops which have potential for adoption as an alternative to traditional crops in the *kharif* season. Laxmeshwara block historically receives slightly higher rainfall compared to other blocks in the District which provides a favorable condition for cultivation of soybean crop. Considering these facts, it was proposed to conduct front line demonstration on introduction of high yielding and rust disease resistant KDS 753 variety of Soybean in Akkigunda cluster of villages of Laxmeshwara block.

INTERVENTIONS OF KVK

ICAR-KVK, Gadag conducted Front Line Demonstration (FLD) on Soybean crop. Under this FLD, KDS 753 variety was introduced with five demonstrations in Akkigunda cluster of villages under Laxmeshwara block. The details of KDS 753 variety of soybean have been depicted in Table 1.

Table 1. Details of KDS 753 variety of Soybean

Sl. No.	Particulars	Details / Values
1.	Variety	KDS 753 (Phule Kimaya)
2.	Source of Technology	MPKV, Rahuri
3.	Recommended season	*Kharif*
4.	Sowing time	Last week of June to first week of July
5.	Seed rate (kg/ha)	72.5
6.	Crop duration (days)	105-110 days
7.	Productivity (q/ha)	25-30
8.	Characteristics	High yielding and resistant to rust disease

OUTPUT AND OUTCOME

Mr. Prashant Chikkannavar, resident of Adarkatti used to cultivate local variety (JS-335) of soybean in his farm. He was facing constraints such as low yield and high incidence of rust disease in existing variety. Mr. Prashant participated in FLD on Introduction of KDS-753 variety of Soybean for the year 2024-25.

He received timely advisories from KVK on integrated crop management practices in soybean and pest and disease management aspects. He also participated in training programmes on production technology for Soybean. The performance of KDS 753 variety in his field is given in Table 2.

Table 2. Performance of KDS 753 variety of Soybean

Sl. No.	Performance parameters	Demo: KDS-753	Local: JS-335
1.	Yield (q/ha)	15.38	11.05
2.	Cost of cultivation (Rs./ha)	31100	31375
3.	Gross returns (Rs./ha)	66134	47515
4.	Net returns (Rs./ha)	35034	16140
5.	B: C ratio	2.12	1.51
6.	% increase in yield	39.18	-
7.	% increase in net returns	117.06	-

The demonstrated variety (KDS 753) performed better than local variety in the farmer's field. The farmer achieved higher yields due to low incidence of rust, even with the highly variable rainfall situation. Timely advisories and diagnostic field visits of KVK scientists helped him to take up field operations regularly. The demonstrated variety resulted in increase in yield by 4.33 q/ha and additional net income of Rs. 18894 /ha was realized by the farmer compared to local variety.

Farmer in Soybean demonstration field

KVK Scientist interacting with the farmer

2) "FROM STRUGGLE TO SUCCESS: RENUKA'S TAILORING JOURNEY"

Smt. Renuka Suneel Kumar aged 36 years is a resident of Beladhadi village of Gadag block in Gadag district. She is married and having 2 kids. She is landless agricultural labourer and engaged in tailoring activity during non agricultural season. However the income she got from tailoring was insufficient to meet the livelihood needs of her family. Her husband Shri Suneel Kumar involved in marketing of Lambani ornaments which are being wore by- the Lambani women. He goes village to village and sells the ornaments during fairs and festivals. But his earnings were inadequate. Smt. Renuka learned tailoring long ago. But she was not perfect in stitching. Still then she used to stitch the blouses and other dresses. The customers were not happy with her stitching. During this period, ICAR-K.H.Patil Krishi Vigyan Kendra received a project from ICAR-NAARM to provide advanced tailoring techniques to Schedule Caste individuals focusing on skill enhancement in tailoring. KVK scientists selected Beladhadi, Nabhapur and Shingatarayanakeri Tanda of Gadag district for this initiative.

Renuka came into contact with KVK during a group meeting with farmers and expressed her need and willingness to participate in the skill enhancement training. She attended the 10-day tailoring training program from September 21, 2024, to September 30, 2024, sponsored by NAARM, Hyderabad. During the training, she learned new designs for saree blouses, salwar suits, school uniforms, and saree petticoats. Additionally, she mastered the fine skills and techniques that she had struggled with before.

After completing the training, Renuka was provided with a new tailoring machine. From that point on, she began stitching more effectively, attracting more customers each day. She eventually opened her shop in the village. Before attending the training, Renuka's daily earnings ranged from ₹200 to ₹250. Now, she earns ₹500 to ₹600 daily and is hopeful of reaching ₹1000 per day by the end of the year. She is genuinely happy and optimistic about her future.

3) EXPLORING DAIRY ENTERPRISE WITH SKILL TRAINING

BACKGROUND

Mr. Modinsab Mohammadsab Angadi, resident of Hombal village in Gadag block was one of those farmers who envision big stage but lack proper guidance to achieve it. He has a landholding of 4 ha and blessed with a source of irrigation water through borewell. However, available irrigation water was not sufficient for his entire land holding and also the black cotton soil in his field is not suitable for growing perennial or commercial crops. He then thought of subsidiary options and decided to start dairy enterprise. He started dairy farming by purchasing two HF cows in the year 2017. Since he had little knowledge on management of dairy animals, the average daily milk yield from his two HF cows was only 14-18 litres. In order to make his dairy enterprise into profitable venture, he approached ICAR-KVK, Gadag during 2020-21 seeking technical inputs.

INTERVENTIONS OF KVK

Mr. Modinsab collected information regarding training programmes related to dairy enterprise and he joined for 30 days skill training on "Scientific Dairy Management" under ASCI programme during 2021-22. The farmer got exposed to various aspects of dairy enterprise such as:

- Management of dairy animals
- Feeding practices for dairy animals to enhance milk yield
- Maintenance of health and hygiene of dairy animals
- Nutrition and disease management
- Cultivation of fodder crops
- Preparation of total mixed rations and feeding balanced diet

Apart from above aspects, he also visited dairy farms of successful entrepreneurs and farmers who are into dairy enterprise and gained useful information. The training also helped him to acquire knowledge about marketing of milk and milk products.

OUTCOME AND IMPACT

After attending the skill training on scientific dairy management, Mr. Modinsab added 5 more cows of HF breed in his dairy farm. He started incorporating the technologies and practices of scientific dairy management in his farm which he learnt during his training tenure. Earlier he used to feed only dry fodder to his animals. After the training, he started cultivating Super Napier fodder grass in 0.2 acre land and started feeding it along with dry fodder. In order to safeguard his animals from environmental anomalies and insect pests, he has provided tin sheet roofing and netted walls along with concrete flooring. At present, the farmer has 10 cows of HF breed and he is also involved in marketing of milk. He has started milk collection and distribution centre to one of the prominent dairy unit by collecting milk from around 25 farmers in his village at 300 to 350 L/day.

With all these interventions, the farmer could achieve higher returns through scientific dairy enterprise along with field crop cultivation. Outcome of training programme on his dairy enterprise is shown in Table 1.

Table 1. Outcome of skill training on Scientific Dairy Management

Sl. No.	Enterprise	No. of milch animals		Milk yield (L/day)		Annual Net Income (Rs.)		Increase in milk yield (%)	Increase in Net Income (%)
		Before	After	Before	After	Before	After		
1.	Dairy	02	10	16	120	2,16,000	6,60,000	650	205.55

From the above table, it can be inferred that Mr. Modinsab has tasted great success by adopting scientific dairy management practices in his dairy farm. The skill training programme could provide him the technical support while his inherent courage prompted him to expand his dairy farm into a profitable venture. The farmer was able to realize additional income of Rs. 4,40,000 / year only through dairy enterprise. His net income rose by 205.55 % compared to the period before he took training. Hence, it can be said that Mr. Modinsab Angadi has achieved prosperity in his dairy enterprise and his journey also inspires many aspiring farmers to practice dairy farming and come out in flying colours.

Mr. Modinsab involved in milking of cows

Farmer feeding the cows in his dairy farm

10.D. Give details of innovative methodology or innovative approach of transfer of technology developed and used during the year

TECHNOLOGY TRANSFER THROUGH QR CODES

QR codes are developed for the technologies by uploading them to youtube channel of KVK. Many success stories of farmers are also uploaded to youtube channel. QR codes are also developed for important mobile apps. QR codes are displayed at office premises. Farmers visiting KVK scan QR code and download apps.

Thus, QR codes have become popular means to transfer the technology to farmers.

10.E. Give details of indigenous technical knowledge practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK	Scientific Rationale
1	Crops	To reduce the infestation of weed i.e Cyprus rotundus, the farmers practice weekly harrowing throughout the end of rainy season i.e from April to October. Then they will take up Rabi Sorghum crop.	Every week harrowing with blade goes on cutting the fresh sprouting meristems of the weed Cyprus rotundus. This weekly cutting results in exhausting of the nutrients present in the bulbs of weeds and no chance for photosynthesis by leaves. Hence, the roots get deprived of the fresh photosynthates on one hand and on other the stored energy gets lost due to growth of fresh meristems every week, but they get cut off with harrowing blade. Thus, the weed has no chance of re-growth when weekly harrowing is done regularly from April to October.	The weekly cutting results in exhausting of the nutrients present in the bulbs of weeds and no chance for photosynthesis by leaves. Hence, the roots get deprived of the fresh photosynthates on one hand and on other the stored energy gets lost due to growth of fresh meristems every week, but they get cut off with harrowing blade. Thus, the weed has no chance of re-growth when weekly harrowing is done regularly from April to October
2	Livestock	Turmeric powder mixed in ghee, heated and applied	For the healing of wound	Turmeric has got anti microbial properties.
3	Livestock	Washing of hoves of animals with lime water	For the treatment of foot and mouth disease	Lime has antiseptic property. It kills germs and healing is fast.
4	Livestock	Zeera & Garlic are boiled in water and is fed	For the treatment of fever	Act as anti cold& fever.
5	Livestock	• Tobacco shoot with Kerosine oil paste is made and applied • Leaves of neem or neem oil	For the treatment of ecto parasite infestation	Tobacco contain nicotine that kills ecto parasite. Neem has got ectoparasiticadal properties.
6	Livestock	Feeding of Brinjal 1 Kg/day for 10 days to dairy animal	Reduced high temperature stress leads the dairy animals come into heat	Potassium content is more in Brinjal. So Potassium helps to reduce high temperature stress.
7	Livestock	Feeding of handful of curry leaves to dairy animals / day for 10 days after AI done.	Increased percentage of conception rate	They are rich in Proteins, Phosphorus, Calcium, Iron, Folic acid, Vitamins like A,B,C & E and these help in higher percentage of conception.

10 F. Technology Week celebration:

Period of observing Technology Week: **From 23-01-2024 to 28-01-2024**

Total number of farmers visited :**9500**

Total number of agencies involved :**1**

Number of demonstrations visited by the farmers within KVK campus :**6**

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Lectures organized	4	183	Lectures organized on crop & dairy technologies
Exhibition	1	9500	Both crop and livestock technologies
Film show	1	40	Nutri Garden
Fair			
Farm Visit	3	152	Rabi crops, Livestock, Agricultural Machineries
Diagnostic Practicals	3	87	Method demonstration on use of Phermone traps, spray of Pulse Magic & solar operated sprayer
Supply of Literature (No.)	8	6400	Crop technology& others
Supply of Seed (q)	0	-	-
Supply of Planting materials (No.)	-	-	-
Bio Product supply (Kg)	200	100	Pulse magic
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week		**9500**	

10 E. Recognition and Awards:

1) Best Exhibition Stall Award at International Conferenceon evolving extension science towards secondary agriculture for sustainable development

2) Best Poster Presentation Award at National Conference on Millets held at NIASM, Baramti

3) National Level Best Cashew Farmer Award to Mr. Basavaraj Halli by DCCD, Cochin

4) Millionnaire Farmer Award to Mrs. Managala Kiran Neelagund by ICAR and Krishi Jagaran

5) District Level Best Farmer Award to Mr. Ashok Halakeri by UAS, Dharwad

6) Mr. Ashok Halli : Received certificate of Registration form PPV & FR Authority for development of seed production of “Sadagara Nandyal” variety of “Rabi Sorghu” crop through “Desi Beeja – Samrakshara Sangh”

PART XI – SOIL AND WATER TEST

11.1 Activities of Soil and Water Testing Laboratory

A. Status of establishment of Lab **:**

1. Year of establishment : 2005-06
2. List of equipment's purchased with amount : 01.07.2005

Sl. No	Name of the Equipment	Qty.	Cost	Status
	A) Non-recurring contingency			
1	Spectrophotmeter	1	0.60	
2	Flame photometer	1	0.50	
3	pH meter	1	0.10	
4	Conductivity bridge	1	0.10	
5	Physical balance	1	0.10	
6	Chemical balance	1	1.00	
7	Water distillation still	1	1.00	
8	Orbital shaker	2	0.60	
9	Shaker	2	0.50	
10	Refrigerator	1	0.20	
11	Oven with optional attachments	1	0.15	
12	Hot plate with all models	1	0.25	
13	Grinder with motor	1	0.30	
14	Laboratory set up (all basic facilities)		3.20	
15	PUSHA STFR meter Kit	1	0.75	
16	MRIDAPARIKSHA	1	0.903	
	Total (A)		**10.253**	
	B) Recurring contingency			
1	Chemical &glasswares		3.50	
2	Miscellaneous items		0.20	
3	Soil and plant sample processing and storage facility		0.50	
	Total (B)		**4.20**	
	Grand Total (A+B)		**14.453**	

B. Details of samples analyzed since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	11823	26212	411	
Water Samples	6011	5850	411	
Plant samples	138	138	411	
Manure samples				
Others (specify)				
Total	**17972**	**32200**	**411**	

C. Details of samples analyzed during the year 2024:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	530	522	160	
Water Samples	316	310	154	
Plant samples	12	12	4	
Manure samples				
Others (specify)				
Total	858	844	160	

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1. PUSA SFTR meter kit	22-02-2016	Working
1. MRIDA PARIKSHAK	31-03-2017	Not Working (Under repair)

B. Details of soil samples analyzed and since establishment with Mobile Soil Testing Kit:

	During 2023	During 2024	Cumulative progres (Total)
Samples analyzed (No.)	215	175	2203
Farmers benefited (No.)	578	440	6306
Villages covered (No.)	34	4	43

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit:

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	01-01-2024 to 31-12-2024	156	352	355	845
Mobile Soil Testing Kit	01-01-2024 to 31-12-2024	4	170	175	440

11.4 World Soil Health Day celebration

Sl. No.	**Farmers participated (No.)**	**Soil health cards issued (No.)**	**VIPs (MP/ Minister/MLA attended (No.)**	**Other Public Representatives participated**	**Officials participated (No.)**	**Media coverage (No.)**
1	126	89	-	2	11	2

PART XII. IMPACT

12.A. Impact of KVK activities (Not restricted for reporting period)

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Nipping in Bengalgram	160	50	Rs.22,500/ha	Rs.29,800/ha
Feeding of Silage Fodder to CB Cows	130	24	Rs.15,066/ lactation/cow	Rs.19,576/ lactation/cow
Mango special (micronutrient mixture) application	86	80	Rs.80,000/ha	Rs.1,20,000/ha
Introduction of Arka Prasanna improved variety in Ridegourd crop	37	55	Rs.83,000/ha	Rs.1,25,000/ha
Azolla as animal feed	150	35	Rs.9300/cow /lactation	Rs.13287/cow / lactation
Use of ISF-764 variety of Safflower along with ICM Practices	154	80	Rs.25,000/ha	Rs.35,000/ha
Use of Arka Vegetable special for micronutrient management in vegetables	60	55	Rs.67,000/ ha	Rs.79,000/- ha
Use of Chickpea Magic for foliar spray in Bengalgram	1000	90	Rs.75,000/ha	Rs.93750/ha
Use of DGGV-2 variety of Greengram along with ICM Practices	533	40	Rs.58900/ha	Rs.77500/ha
Fruit fly traps for management of Mango and Guava fruit fly	25	50	Ra.80,000/ha	Rs.100000/ha

12.B. Cases of large scale adoption
(Please furnish detailed information for each case with suitable photographs)

Large scale adoption of Bhima Super variety of onion

Onion is a major vegetable and spice crop cultivated in the Gadag district of Karnataka, primarily grown during the Kharif season under rainfed conditions. Covering an area of 32642 hectares (as of 2022-23) with a production of 154743 tons, the district's average productivity stands at 4.74 tons per hectare.

Among the five blocks in Gadag, Ron block leads with the largest cultivation area (14845 ha), followed by Gadag (12166 ha), Mundaragi (2770ha), Shirahatti (1631 ha), and Naragund (1230 ha). Onions are typically grown in vertisols and alfisols, often intercropped with dry chili and desi cotton as part of an age-old farming practice. For many years, farmers have relied on traditional onion varieties like Bellary Red and Gurva, but there has been a steady decline in both bulb productivity and quality. An analysis by ICAR-KVK, Gadag revealed that these traditional varieties

are highly susceptible to pests like thrips (*Thrips tabaci*), diseases such as bulb rot (*Fusarium oxysporum*), and Alternaria purple blotch (*Alternaria porri*), leading to significant losses for farmers.

Recognizing the economic significance of onion cultivation in the district, the Krishi Vigyan Kendra (KVK) conducted On-Farm Testing (OFT) to evaluate the performance of the Bhima Super variety, developed by ICAR-DOGR, Pune. The assessment, conducted over a three-years (2018–2022) in 10 farmers' fields, focused on tolerance to thrips and purple blotch diseases, along with its potential for enhanced productivity. As part of the evaluation, KVK organized four training programs involving 135 farmers and carried out 85 technical field visits to provide support and monitor the trials. The OFT results demonstrated a significant reduction in the incidence of thrips by 30% and purple blotch by 50% in the Bhima Super variety compared to Bellary Red and Gurva varieties when coupled with scientific management practices. This resulted in 27.32% increase in the yield. Farmers highlighted the variety's superior performance like its tolerance to thrips and foliar diseases, uniform bulb size, attractive bulb color and better market price (ranging from Rs. 750 to Rs. 800 per quintal) compared to local varieties.

Encouraged by the positive results, KVK introduced Bhima Super through Front Line Demonstrations (FLDs) in cluster villages. Under FLDs, the variety achieved an average productivity of 37.78 quintals per hectare compared to 29.79 quintals per hectare for local checks, indicating a yield advantage of 26.80% under rainfed conditions. Additionally, KVK facilitated five seed production demonstrations in 2020–21 and 45 varietal demonstrations during the period 2022–23 to 2024-25.

As a result of these efforts, Bhima Super has been widely adopted in the district, now occupying nearly 15,000 hectares out of the total 30,000 hectares under onion cultivation. KVK produced 671 kgs of Bhima Super seeds at its instructional farm and supplied the seeds to 583 famers during last six years. With the raise in the demand KVK started farmer participatory seed production models. 520 kgs of seeds are supplied to 385 farmers of Chitradurga, Ranebennuru and Vijayanagara disticts. They became the regular buyers of Bhima Super seeds from KVK,Gadag.

12.C. Details of impact analysis of KVK activities carried out during the reporting period :

I. IMPACT ANALYSIS OF CUSTOM HIRING SERVICE CENTRE ESTABLISHED UNDER NICRA PROJECT

BACKGROUND

Timely field operations play a vital role in getting good crop yield. Farmers practicing field crop cultivation often face challenge of non availability of timely labour. Escalating labour wages are also a major challenge faced by the farmers. The dependence on labour for various operations can be solved by adopting mechanization. Mechanized operations in field crops is inevitable owing to the present labour situations and to cope up with changing trend of cropping systems. However, purchasing tractors and farm machineries results in economic burden for small and marginal farmers. Hence, custom hiring service centre of farm machinery (CHC) is very apt solution to tackle the labour problem and also to perform the field operations in time. In this backdrop, a custom hiring service centre was established by ICAR-KVK, Gadag in Shingatrayankeri village of Mundaragi block under NICRA project.

KVK INTERVENTIONS

ICAR-KVK, Gadag under NICRA project has established custom hiring service centre at Shingatrayankeri village in order to provide assured availability of farm equipment during various operational seasons. Capacity building programmes and method demonstrations on operation and maintenance of various farm machinery were organized to sensitize about utility of farm equipment. Farm machineries meant for seedbed preparation, sowing, intercultivation, spraying and chaffing operation have been purchased and placed in the custom hiring centre. The centre is managed by farmers in the NICRA village.

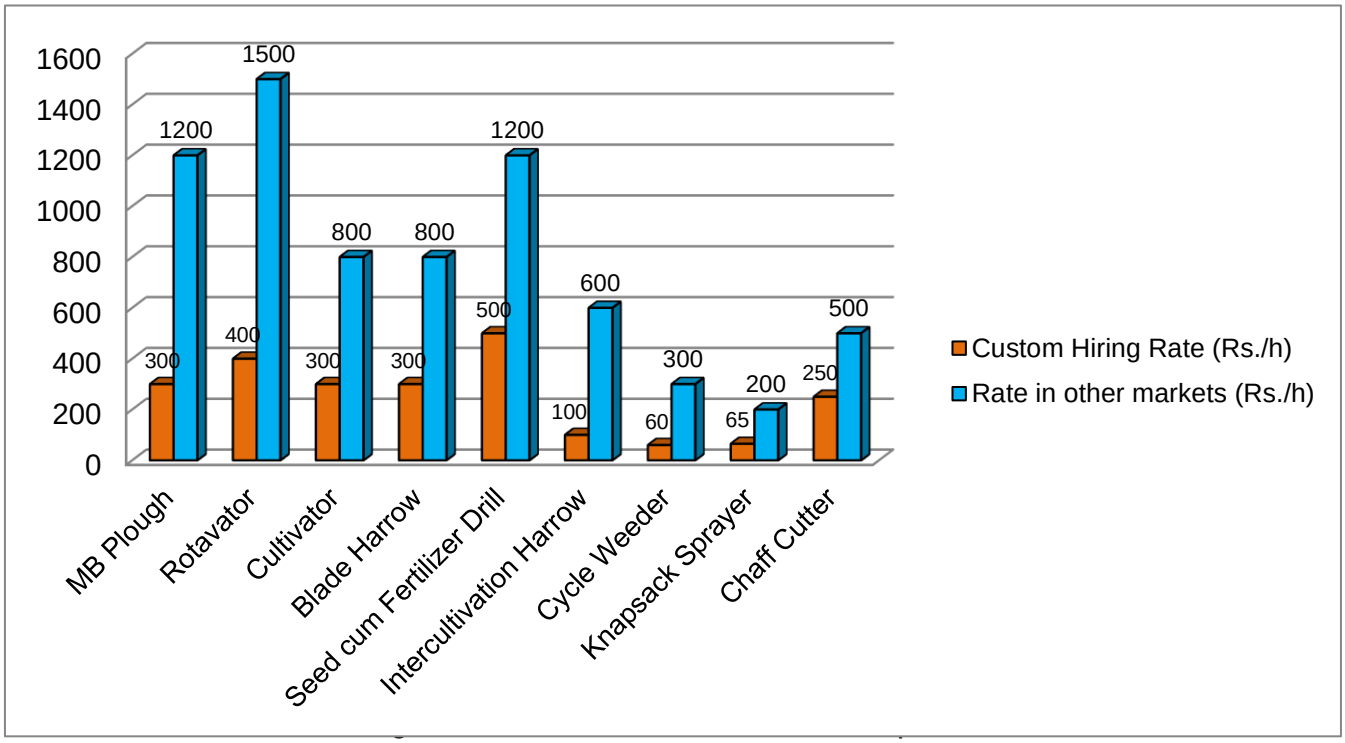
Details of Equipment available in CHC:

- **Seedbed preparation equipment:** Four bottom mould board plough, Two bottom mould board plough, Nine tine rigid cultivator, Five tine duckfoot cultivator, Bund former, Blade harrow, Rotavator.
- **Sowing equipment:** Tractor Operated Automatic Seed cum Fertilizer Drill
- **Intercultivation equipment:** Intercultivation Harrow, Cycle Weeder

- **Spraying equipment:** Battery Operated Knapsack Sprayer
- **Others:** Engine Operated Chaff Cutter and Hand Tools

OUTPUT AND OUTCOME

Custom Hiring Service Centre under NICRA project has been instrumental in providing agricultural equipment to farmers in the village at minimal rental cost. Farmers have reported considerable saving in cost of operation for various activities by using machineries procured under CHC. The comparative rental costs are shown in Fig.1.



operations using equipment procured under CHC. The reduction in cost of operation was about 195.83 % and thereby the net income was significantly increased. In addition to that, farmers have expressed advantage of saving in labour in selected operations such as weeding and intercultivation. Using cycle weeder, saving of 70 % in labour hours was realized compared to manual weeding operation.

Lion's share of the revenue generated from CHC has been utilized for repair and periodic maintenance of farm equipment. Some part of it was used for fuel and overhead charges. Details of year wise and equipment wise revenue generated and hours of operation are depicted in Table 1.

Table 1. Details of year wise and equipment wise revenue generated and hours of operation

Sl. No	Name of the equipment	Hours of operation	Revenue Generated (Rs.)	Hours of operation	Revenue Generated (Rs.)	Hours of operation	Revenue Generated (Rs.)
		2021-22		2022-23		2023-24	
1.	Mouldboard Plough	01	300	01	300	03	900
2.	Rotavator	02	800	02	800	01	400
3.	Cultivator	01	300	02	600	02	600
3.	Blade Harrow	03	900	03	900	10	3000
4.	Seed cum Fertilizer Drill	-	-	01	500	02	1000
5.	Intercultivation Harrow	02	200	02	200	04	400
6.	Cycle Weeder	-	-	01	60	01	60
7.	Knapsack Sprayer	-	-	02	130	10	650
8.	Chaff Cutter	-	-	-	-	01	250
9.	Hand tools	05	35				
Total		**14**	**2535**	**14**	**3490**	**34**	**7260**

IMPACT OF CUSTOM HIRING SERVICE CENTRE:

ICAR-KVK, Gadag intervened through establishment of custom hiring service centre of farm machinery under NICRA project in Shingatryankeri village. capacity building programmes and method demonstrations were conducted to spread awareness about mechanization in various field operations. Agricultural implements and equipment ranging from seedbed preparation to harvesting were procured and placed in CHC based on the need of the farmers in the village. The custom hiring rates of the equipment were decided in the VCRMC meeting.

Most of the farmers in the village are having small and marginal land holdings. The CHC established under NICRA project has helped them to utilize the equipment effectively for their field operations. During 2021-22 to 2023-24, about 11 farm equipment have been procured. Nearly 47 farmers in the village were benefited by the established CHC. Totally 62 hours of operation was carried out in three years' span with CHC equipment and around Rs. 13,285 of revenue has been generated. The intangible advantages of CHC include

saving in time of operation, saving in labour hours and most importantly awareness on mechanization in various field crops and horticultural crops prevailing in the village. Since the custom hiring centre is managed by the group of farmers in the village, there exists a sense of mutual faith on the operationalization and periodical maitanance of the equipment.

II. IMPACT OF INTERVENTIONS BY ICAR-KHPKVK, GADAG IN GREENGRAM FOR HIGHER PRODUCTIVITY

Introduction

Greengram (*Vigna radiata*) is one of the most important pulse crops. India is the major producer of Greengram in the world, and it is grown in almost all the states. In India during 2023-24, about 15.93 lakh ha (39.38 lakh acres) area was under Greengram. The total production of Greengram was 31.5 lakh tonnes and productivity of 783 kg/ha during 2022-23. It contributes 11 % to the total pulse production in our country. Karnataka stands at 2nd place in India with 4.14 lakh ha area under Greengram contributing 17.46 % of the total production in the country. In northern part of Karnataka state greengram is a major pulse crop cultivated mostly during *kharif* season. In Gadag district, sorghum is predominantly cultivated in *kharif* season under rainfed situation.

The area, production and productivity of Greengram in Gadag District is presented in Table – 1

Table 1. Production Scenario of Greengram in Gadag district

Year	Area (ha)	Production (tons)	Productivity (kg/ha)
2018-19	140566	19363	145
2019-20	96267	21858	239
2020-21	122811	20701	172
2021-22	90252	18686	207
2022-23	130109	47560	373

Production Constraints in Greengram

Greengram is cultivated in deep and shallow black soils as well as in red soils in the district. It is mainly grown as a sole crop. It is generally sown in the months of May to July. Good Early onset of South West monsoon during the month of May – June usually brings better prospects for Greengram production. However frequent occurrence of agricultural drought and long dry spells during *kharif* season has severely affected the productivity of Greengram.

Untimely rain during the harvesting period of Greengram is another factor that contributes for low productivity. Majority of farmers use local variety of Shining Moong, the genetic potentiality of

which has decreased over the period of time. Direct marketing of Greengram in local market results in low price due to ungraded produce. The Problem-Cause Tree for low productivity of Greengram in Gadag District is presented in Fig.1.

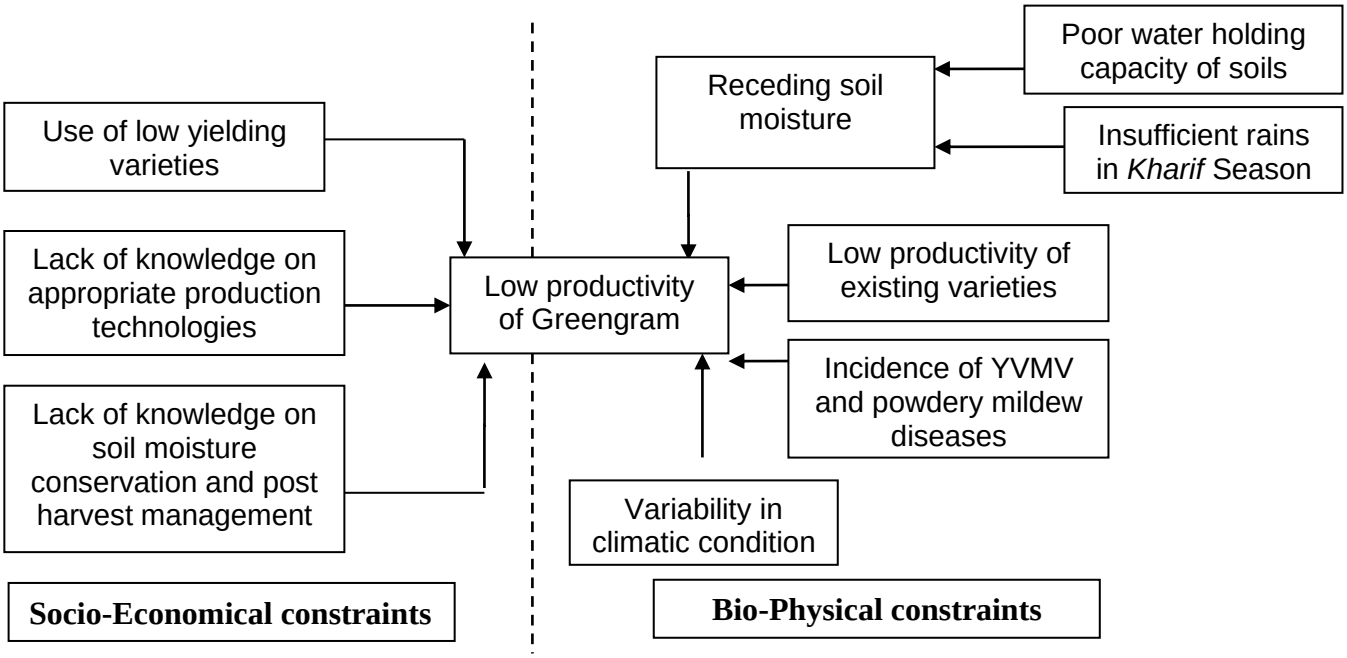


Fig. 1 Problem-Cause Tree for low productivity of Greengram in Gadag district

Problem Analysis and Interventions

The above Problem-Cause Tree clearly reveals the primary and secondary causes for low productivity in Greengram. KVK Gadag thoroughly examined the causes and analyzed the problems and technological gaps. Then suitable interventions were made to address the productivity constraints as mentioned below.

Problems	**Technological Interventions**	**Tools used**
Decreasing genetic potentiality of China Moong variety	➢ Promotion of high yielding DGGV-2 variety	➢ On-Farm Testing ➢ Front Line Demonstrations ➢ Training on ICM practices
Moisture stress during critical stages of crop growth	➢ Compartmental bunding ➢ Seed priming with $CaCl_2$	➢ Front line demonstrations ➢ Method demonstrations
Non availability of quality seeds	➢ Seed production and supply	➢ Training programmes on seed production
Lack of knowledge on appropriate production technologies	➢ Promotion of Integrated Crop Management practices	➢ Organization of On and Off campus training programmes

Problems	Technological Interventions	Tools used
Incidence of YVMV and powdery mildew disease	➢ Seed treatment with Rhizobium, Trichoderma and PSB	➢ Method demonstrations ➢ Training programmes on seed treatment
Imbalanced Nutrition	➢ Foliar spray of Pulse Magic (Micronutrient mixture) during flowering & grain filling stage @ 1 %	➢ Method demonstrations ➢ Training programmes on Nutrition Management

INTERVENTIONS OF ICAR-KVK, GADAG

Based on the identified problems, KVK made various interventions from 2018-19 to 2022-23 with major focus on organization of Front Line Demonstrations in farmers' fields along with training and extension activities. The details of interventions are given below.

1) On-Farm Testing

The major objective of conducting On-farm testing (OFT) in Greengram crop was to assess the yield potentials of different improved varieties to fill the productivity gap between potential and existing yield levels. Based on the preliminary study on productivity of existing varieties of Greengram *viz*., Shining Moong, BGS-9 and other local varieties, KVK has planned an on-farm testing to identify the potential high yielding variety to replace low yield varieties in the District. The details of OFT conducted in Greengram crop during 2022-23 are presented in Table 2.

Table 2. Details of On-Farm Testing conducted in Greengram

Varieties tested	Area (ha)	No. of farmers	No. of villages covered
i) DGGV-2 ii) DGGV-7	1.2	03	02

2) Organization of Front Line Demonstrations :

KVK organized Front Line Demonstrations in farmers' fields to address the identified productivity constraints in Greengram. Various technological components such as compartmental bunding for *in-situ* soil moisture conservation,

seed priming with $CaCl_2$ to withstand moisture stress during critical stages of crop growth, seed treatment with Trichoderma, Rhizobium and PSB for disease resistance and introduction of high yielding DGGV-2 variety were demonstrated along with Integrated Crop Management practices. Periodical farm advisory services were rendered by KVK scientists during the various stages of crop growth. Method demonstrations of grading equipment namely spiral separator and screen cleaner cum grader were conducted to create awareness about post harvest handling of grains. The details of Front Line Demonstrations organized by KVK including CFLDs under NFSM during 2018-19 to 2022-23 are presented in Table 3.

Table 3. Details of Front Line Demonstrations organized in Greengram

Year	Area (ha)	No. of farmers	No. of villages covered
2018-19	40	100	04
2019-20	28	70	04
2020-21	34	85	04
2021-22	18	45	04
2022-23	10	25	03
Total	**130**	**325**	**19**

KVK has organized Front Line Demonstrations in 130 hectares and 325 farmers from 19 villages participated in the programme during 2018-19 to 2022-23.

3) Organization of Training Programmes :

Knowledge and skill dissemination on production technologies in Greengram was the major focus of KVK to address the technological constraints in the Greengram crop. Based on the identified thrust area, KVK designed the training module for farmers and accordingly conducted training programmes. The details of year wise training programmes organized by KVK during 2018-19 to 2022-23 are presented in Table 4.

Table 4. Training programmes organized

Year	Title of training	No. of programmes	No. of Participants
2018-19	▪ Compartment bunding and seed priming with $CaCl_2$	02	76
	▪ ICM in Greengram	04	165
2019-20	▪ Compartment bunding and seed priming with $CaCl_2$	01	56
	▪ Seed treatment with Trichoderma,	03	102

Year	Title of training	No. of programmes	No. of Participants
	Rhizobium and PSB		
	▪ ICM in Greengram	02	84
2020-21	▪ Seed treatment with Trichoderma, Rhizobium and PSB	02	87
	▪ ICM in Greengram	03	106
2021-22	▪ Compartment bunding for *in-situ* moisture conservation	02	66
	▪ ICM in Greengram	04	154
2022-23	▪ Compartment bunding for *in-situ* moisture conservation	02	65
	▪ Seed treatment with Trichoderma, Rhizobium and PSB	03	94
	▪ ICM in Greengram	02	75
	TOTAL	**30**	**1130**

During the period from 2018-19 to 2022-23, KVK organized 30 on-campus and off-campus training programmes for 1130 farmers on various aspects of Greengram cultivation.

4) Organization of extension programmes :

KVK organized various extension programmes in order to accelerate the spread of technological interventions in Greengram. Field days on demonstrated technologies, farmers' interactive group discussions and exposure visits, farm advisory services and mass media programmes were organized to popularize the technologies of Greengram. The details of the extension programmes organized are presented in Table 5.

Table 5. Extension programmes organized

Sl. No	Particulars	No. of programmes	No. of Participants
1	Field days	06	622
2	Group discussions	04	168
3	Exposure visits to KVK farm	07	216
4	Farm advisory services	165	165
5	Field visits	104	165
6	Webinars	02	43
7	Radio talks by KVK experts	07	-
	Total	**295**	**1379**

About 295 extension programmes have been organized involving 1379 participants during the period from 2018-19 to 2022-23.

5) Seed production activities of KVK and Farmers :

As a result of various extension activities carried out by KVK and performance of DGGV 2 variety, there was high level of acceptance by the farmers. Hence, the demand for

Greengram seeds of DGGV 2 variety started escalating. KVK started seed production of DGGV 2 variety in its farm and started supplying seeds to farmers.

KVK also identified 09 progressive farmers for participatory seed production of DGGV 2 variety. The details of year wise seed produced and supplied by KVK as well as seed producing farmers are presented in Table 6.

Table 6. Seed production and supply of seeds

Year	KVK		Seed producing farmers		Total (KVK + farmers)	
	Quantity (Q)	Supplied to no. of farmers	Quantity (Q)	Supplied to no. of farmers	Quantity (Q)	Supplied to no. of farmers
2018-19	4.23	30	0.6	11	4.83	41
2019-20	8.10	112	1.35	23	9.45	135
2020-21	2.95	75	1.21	34	4.16	109
2021-22	2.65	60	1.44	29	4.09	89
2022-23	3.97	51	1.76	42	5.73	93
Total	**21.9**	**328**	**6.36**	**139**	**28.26**	**467**

During last 5 years, KVK and seed producing farmers produced 28.26 quintals of seeds and supplied to 467 farmers.

OUTCOME AND IMPACT

Efforts of KVK to address the productivity constraints and for dissemination of integrated management practices in Greengram through Front Line Demonstrations, training programmes, extension activities, advisory services and seed production programmes have resulted in increased productivity of Greengram besides horizontal spread of technologies. The details of outcome and impact of interventions are discussed below.

1) Results of assessment of Greengram varieties through OFT

On-farm testing (OFT) on Greengram for assessing higher productivity options were conducted in two villages namely Halligudi and Asundi during 2022-23. The results of OFT are given in Table 7.

Table 7. Results of On-Farm Testing on Greengram for higher productivity

Technology Assessed	Grain yield (Qtl/ha)	% Increase in yield	Plant height (cm)	No. of pods per plant	Net returns (Rs/ha)	B.C. Ratio
Farmers' Practice : Shining Moong	7.78	-	33.2	23.29	28065	2.21
Technology option 1: DGGV-2	11.93	53.37	44.2	31.89	54955	3.31
Technology option 2: DGGV-7	7.98	2.57	33.8	24.22	28885	2.22

From the above results, it is evident that DGGV-2 variety performed better compared to other varieties viz., DGGV 7 and Shining Moong. DGGV 2 variety resulted in increase in yield by 53.37 % and net returns increased by Rs. 26,890 per hectare when compared to farmers' practice. B.C. ratio of 3.31 was observed with DGGV 2 variety while local variety has shown B.C. ratio of 2.21.

2) Economic performances of FLD programmes:

The Front Line Demonstration (FLD) programmes were implemented based on the thrust areas identified. The FLDs have resulted in increased productivity of Greengram in selected villages. Over the period of five years (2018-19 to 2022-23), there has been a consistent performance of Greengram technologies as reflected in the yield levels. There has been an average increase in yield by 26.88 per cent over farmers' practice (Table 8). Average net returns of Rs. 27513.2 per hectare was achieved with a benefit cost ratio of 2.09 as against net returns of Rs. 17516.8 per hectare and BC ratio of 1.73 in farmers' practice.

The perusal of Table 9 reveals that the performance of DGGV 2 variety of Greengram under FLD programme was outstanding in comparison to district productivity. About 322.77 per cent increase in yield under FLD programme is noticed as compared against district average.

Table 8. Economic performance of Greengram under FLD

Year	Yield (q/ha)		% increase in yield	Economics of demonstration (Rs./ha)				Economics of Local Check (Rs./ha)			
	Demo	Local check		Gross cost	Gross return	Net return	BCR	Gross cost	Gross return	Net return	BCR
2018-19	8.37	6.71	24.74	28000	46894	18894	1.67	26698	37576	10878	1.41
2019-20	6.95	5.97	16.41	25125	38206	13081	1.52	23642	32821	9179	1.39
2020-21	5.91	4.50	31.33	30294	36642	6348	1.21	25937	27900	1963	1.07
2021-22	12.96	9.36	38.52	25335	80352	55018	3.17	23439	58007	34568	2.47
2022-23	10.30	8.35	23.40	23750	67975	44225	2.86	23250	54246	30996	2.33
Avg.	**8.90**	**6.98**	**26.88**	**26500.8**	**54013.8**	**27513.2**	**2.09**	**24593.2**	**42110.0**	**17516.8**	**1.73**

Table 9 Comparison of Productivity level of Greengram (kg/ha)

Year	District yield (kg/ha)	Demonstration yield (kg/ha)	Farmers' yield (kg/ha)	Percentage increase of demo yield over district yield
2018-19	145	837	671	477.24
2019-20	239	695	597	190.79
2020-21	172	591	450	243.60
2021-22	207	1296	936	526.09
2022-23	373	1030	835	176.14
Average	**227.20**	**889.90**	**697.8**	**322.77**

3) Spread of DGGV 2 variety in Gadag District

The impact of various activities such as front line demonstrations, cluster front line demonstrations, capacity building programmes and awareness programmes have created a high demand for DGGV-2 variety of Greengram in the District. KVK has played a facilitator role by taking up seed production programme in it's farm as well as in farmers' fields with participatory mode. Further, seed chain has also been developed through FLD participating farmers with aim of Farmer to Farmer spread of varieties.

KVK's seed production programme as well as seed production by identified seed producers have achieved considerable success in meeting the demand of DGGV 2 variety. The data presented in Table-6 reveals that KVK, Gadag as well as seed producers and farmers under FLD programme have produced and sold 28.26 quintals of seeds to farmers. In addition, seed producers and FLD farmers have retained DGGV 2 variety for self-use in their farms. Considering all these factors, it can be said that DGGV 2 variety has spread in more than 11000 hectares in last five years in Gadag District and stands as one of the most successful technologies disseminated by ICAR-KVK, Gadag in the district.

PART XIII - LINKAGES

13.A. Details of linkage with ATMA

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	KVK-ATMA Intefernce Meetings	2	2	-
02	**Research projects**		-	-	-
03	**Training programmes**	• ICM in Kharif & Rabi crops • Post Harvest Technology • Farmers' Producers Organisation • Integrated Farming System • Health, nutrition	-	10	Jointly organised with ATMA
04	**Demonstrations**				
05	**Extension Programmes**		12	7	Jointly organised with ATMA
	Kisan Mela		-	1	Jointly organised with ATMA
	Technology Week		1	1	Jointly organised with ATMA
	Exposure visit		5	-	Jointly organised with ATMA
	Exhibition		2	-	Jointly organised with ATMA
	Soil health camps		2	-	Jointly organised with ATMA
	Others (Pl. specify)		-	-	-
	Field Day		4	2	Jointly organised with ATMA
	Jal Shakti Abhiyaan		4	2	Jointly organised with ATMA
	World Food Day		1	1	Jointly organised with ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
	International Womens' Day		1	1	Jointly organised with ATMA
	World Soil Health Day		1	1	Jointly organised with ATMA
	Farmers' field school	-	2	-	Jointly organised with ATMA
	Farmer-Scientist Interaction Meet	-	-	2	Jointly organised with ATMA
06	**Publications**				
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	**Other Activities (Pl. specify)**				

13B. List of special programmes undertaken by the KVK which have been financed by State Government/University/National Horticultural Mission/ RKVY/ National Fisheries Development Board/Other Agencies

S. No.	Name of organization	Name of Programme	Nature of linkage	Funds received in Rs.	Expenditure during the reporting period in Rs.	Remarks

13C. Kisan Mobile Advisory Services

Month	No. of Advisories	No. of Text messages sent	SMS/voice calls sent (No.)						Total SMS/ Voice calls sent (No.)	Farmers benefitted (No.)
			No. of voice messages sent	Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
January 24	5	5	-	1	0	3	1	0	0	5	4560
February 24	5	5	-	1	0	2	1	0	0	5	11000
March 24	6	6	-	1	1	4	1	0	0	6	10200
April 24	6	6	-	2	1	2	1	0	0	6	10180
May 24	8	8	-	2	0	2	0	0	0	8	10400
June 24	15	15	-	5	1	5	2	1	1	15	11630
July 24	12	12	-	4	2	4	1	1	0	12	11200
August 24	10	10	-	2	1	6	1	0	0	10	11600
September 24	9	9	-	2	1	4	1	1	0	9	11200

Month	No. of Advisories	No. of Text messages sent	SMS/voice calls sent (No.)						Total SMS/ Voice calls sent (No.)	Farmers benefitted (No.)
			No. of voice messages sent	Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
October 24	12	12	-	2	2	4	2	1	1	12	11240
November 24	6	6	-	3	1	1	1	0	0	6	11206
December 24	9	9	-	1	1	4	1	1	1	9	11412
Total	**103**	**103**	**0**	**26**	**11**	**41**	**13**	**5**	**3**	**103**	**125828**

PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

14.A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Green House	2007	250 Sq. ft.	Chilli- Arka janvi & Arka yashasvi	Seedlings	30000	12000	30000	

14.B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rabi Jowar	07.10.24		1.0	SPV-2217	Seeds	5.0	2100	22500	Expected
Pulses									
Greengram	12.06.24	28.08.24	6.0	DGGV-2	Seeds	20.0	48090	140000	
Blackgram	17.06.24	11.09.24	1.2	LBG-791	Seeds	6.0	4950	30000	
Bengalgram	06.10.24		4.0	JAKI-9218, Phule vikram	Seeds	25.0	39450	137500	Expected
Oilseeds									
Safflower	26.10.24		6.8	A-2020, DASF-1, ISF-764	Seeds	51.0	46120	255000	Expected
Fibers									
Spices & Plantation crops									
Cashew			0.80	Vengurla-4	Nuts	5.0	20000	50000	Expected
Coconut	2018		4.00	Deejay sampoorna	Tender Nuts		117000	31768	
Coconut + Custardapple	2021		3.00	Kalpa surya, Kalpa jyothi, COD			58000	-	Planted 3 year

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
									s back
Floriculture									
Fruits									
Tamarind			0.60	PKM-1 & DTS-1	Fruit	12.0	8000	60000	Expe cted
Amla			0.60	NA-7, Krishna	Fruit	3.91	-	9775	
Mango			0.80	Alphonso	Fruit	-	24270	100000	Expe cted
Tamarind + Mango + Amla	2021		8.0	DTS-1, Kesar, NA-7		-	15000	-	Plant ed 3 year s back
Agroforestry	2020		0.8			-	3000	-	Plant ed 3 year s back
Vegetabl es									
Others (specify)									

14.C. Performance of production Units (bio-agents/bio pesticides/bio-fertilizers etc.,)

Sl.No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermicompost	140.0 Qtl	28000	56000	
2	Earthworms	0.25 Qtl	4200	7500	
3	Azolla	0.05 Qtl	200	500	

14.D. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Buffaloes	Local	Milk	1099 lit	35000	49635	
2	Cow	Jersey	Milk	1324 lit	37000	44880	
3	Sheep	Nari Suvarna	Lamb	15 lamb	30000	45000	
3	Goat	Jamunapuri local cross	Kid	1 kid	2000	3000	

14E. Utilization of hostel facilities

Accommodation available (No. of beds) : 30

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January, 2024	187	31	-
February, 2024	252	17	-
March, 2024	517	31	-
April, 2024	50	18	-
May, 2024	20	9	-
June, 2024	18	9	-
July, 2024	0	0	One day training programmes were conducted
August, 2024	388	36	-
September, 2024	65	13	
October, 2024	0	0	One day training programmes were conducted
November, 2024	50	3	-
December, 2024	127	11	-

14F. Database management

S. No	Database target	Database created
1	OFT	Already maintained
2	FLD	Already maintained
3	Training database	Already maintained
4	Seeds & planting material	Already maintained
5	All Extension activities	Already maintained
6	Farmers visiting to KVK	Already maintained
7	Field visits	Already maintained
8	District database	Already maintained
9	Soil & water test details	Already maintained
10	Database on KVK (i.e regarding KVK details, host institute details, staff information, KVK land information, KVK infrastructure, demo units, vehicle, office, lab, farm equipment & library)	Already maintained
11	HRD of KVK staff (i.e training/seminar/workshop attended by KVK staff)	Already maintained
12	Publications of KVK activities in news papers	Already maintained
13	Villages covered by KVK since inception	Already maintained
14	Kisan mobile advisory services – Subscribers and messages sent	Already maintained
15	Farm implements	Already maintained
16	Citizen's Client Charter	Already maintained

14.G. Details on Rain Water Harvesting Structure and micro-irrigation system

(a) Rain Water Harvesting Structure

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.		Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
				No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
850000	850000	Graded bund construction	5054.68 cm	5	1	0	170	10	322	3.6 ha
		Construction of waste weirs								

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.		Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
				No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
		1)1.52 feet crust length 2)1.83 feet crust length 3) 2.44 feet crust length 4) 2.74 feet crust length 5) 3.00 feet crust length	5 Nos. 7 Nos. 4 Nos. 3 Nos. 3 Nos.							
		Farm pond	2 Nos.							
		Infiltration wells a) Infiltration Well b) Common tank	 9 Nos. 1 No.							
		Bore well recharge pit	1 No.							
		Sub surface dam	2 Nos.							
		Soak pits	147							
		Check dam	1							

(b) Micro-irrigation systems :

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.		Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
				No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
150000	150000	Drip irrigation system for Dry land Horticulture	5 Ha.	3	0	0	115	7	0	4 Ha.

PART XV – SPECIAL PROGRAMMES

15.1 Paramparagath Krishi Vikas Yojana (PKVY) :NIL

Sl. No.	Name of cluster village	Initial soil fertility status (Average of cluster village)				Facilities created for organic source of manure	Name of Crops cultivated	Variety	Organic inputs applied including bio-agents and botanicals treatment	Yield q/ha)	Economics	
		Aval. N	Aval. P	Aval. K	OC %						Cost of cultivation (Rs/ha)	Net returns (Rs/ha)

15.2 District Agriculture Meteorological Unit (DAMU) : NIL

	Agro advisories			Farmers awareness programmes	
Sl No.	No of Agro advisories generated	No of farmers registered for agro advisories	No of farmers benefitted	No of programmes	No of farmers benefitted
1					
2					
3					
4					

15.3 Fertilizer awareness programme organised

State	Name of KVK	Details of Activities/programmeOrganised	Number of Chief Guests	No. of Farmers attended program	Total participants

15.4 Seed Hub : NIL

Crops	*Variety*	*Year of release*	*Production*				*No. of farmers benefited / Sold to no. of farmers*	*Quantity seed sold (q)*
			Target (q)	*Area (ha.)*	*Actual Production (q)*	*Category (FS/CS)*		

15.5 CFLD on Oilseeds: (Completed CFLDs should provide data for all items of the table and also remaining whichever is available)

Season	Crop	Variety		Conducted		Demo Yield(Q/ha)			Check Yield (Q/ha)	Economics					
										Demo			Check		
		Demo	Check	Demos (No)	Area (ha)	Max	Min	Avg		Gross income	Net income	BCR	Gross income	Net income	BCR
Kharif	Sunflower	KBSH 78	Private Hybrid	50	20	9.68	6.98	9.12	7.36	38478	17330	1.82	29438	9552	1.48
Rabi	Sunflower	KBSH 78	Private Hybrid	125	50	**Under Progress**									
Summer	Groundut	DH 256	TMV-2	125	50	**Under Progress**									

15.6 CFLDs on Pulses: (Completed CFLDs should provide data for all items of the table and also remaining whichever is available)

Season	Crop	Variety		Conducted		Demo Yield(Q/ha)			Check Yield (Q/ha)	Economics					
										Demo			Check		
		Demo	Check	Demos(No)	Area (ha)	Max	Min	Avg		Gross income	Net income	BCR	Gross income	Net income	BCR

15.7 Krishi Kalyan Abhiyan : NIL

Type of Activity	Date(s) conducted	No. of farmers (General)			No. of farmers SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total

15.8 Micro-Irrigation

Type of Activity	Date(s) conducted	No. of farmers (General)			No. of farmers SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Training on Irrigation methods and water management	10-12-2024	45	0	45	3	0	3	1	0	1
	13-12-2024	48	0	48	4	0	4	1	0	1
Training on operation and maintenance of drip irrigation system	06-11-2024	0	0	0	25	0	25	0	0	0
Training programme on Importance of micro irrigation system	29-11-2024	0	0	0	25	0	25	0	0	0

15.9 Tribal Sub-Plan (TSP) :

Sl No	Item/Activity		Units	Achievements (Activities/ Quantity)	ST Beneficiaries (No.)		
					Male	Female	Total
1	Training programmes		No				
	1.1	1-3 days	No	3	52	26	78
	1.2	4-10 days	No				
	1.3	2-4 weeks	No				
	1.4	More than 4 weeks	No				
2	OFTs		No				
3	FLDs		No.	33	25	8	33
4	Extension activities		No.				
	4.1	Awareness camps	No.				
	4.2	Exposure visits/study tours		1	30	0	30
	4.3	Exhibitions					
	4.4	Seminars					
	4.5	Workshops					
	4.6	Group meetings		8	97	23	120
	4.7	Others specify					
5	Input supply						
	5.1	Seeds (Field crops)	Quintal				
	5.2	Seeds (High value crops, spices etc.)	Kg				
	5.3	Seeds (Root & Tuber crops)	Quintal				
	5.4	Nursery plants(Marigold seedlings)	No.	5000	6	4	10
	5.5	Cuttings, Slips, suckers etc.	No.				
	5.6	Mushroom spawns Packets (100 gm)	No.				
	5.7	Bio-fertilizers Packets (one kg)	No.				
	5.8	Honeybee Colonies	No.	8	4	0	4
	5.9	Animals -large					
		Cattle	No.				
		Buffaloes	No.				
		Calves	No.				
	5.10	Animals-Small	No				
		Pig	No				
		Sheep					
		Goat	No				
	5.11	Poultry					
		Ducklings	No				
		Poultry Chicks	No				
		Fish fingerlings					
	5.12	Equipment					
		Small equipment's (up to Rs 2000)	No.				
		Medium equipment's/machinery (Rs 25000)	No.				
		Large equipment's /machinery (> Rs.25000)					
	5.13	Infrastructure	No				
		Civil work/ ponds etc.	No				
		Setting up Plant Nursery/seed farm/hatchery	No				
		Land development/Reclamation/	Hectare				

Sl No	Item/Activity		Units	Achievements (Activities/ Quantity)	ST Beneficiaries (No.)		
					Male	Female	Total
		Conservation					
	5.14	Fertilizers	Quintal				
		Major nutrients NPK					
		Secondary nutrients	Quintal				
		Micronutrients	Quintal	0.10	6	4	10
		FYM	Quintal				
		Vermicompost	Quintal				
		Soil amendments (Gypsum, lime etc.)	Quintal				
	5.15	Plant protection					
		Plant protection chemicals	Kg				
		Plant growth promoters	Kg				
	5.16	Animal Feed mixture	Quintal	55			
	5.17	Animal fodder	Quintal				
	5.18	Animal medicines provided to animals	No.	62			
	5.19	Any other (specify)	No				
		a) pheromone Traps					
		i) Helicoverpa armigera	Nos.	80	6	4	10
		ii) Bractoara cucurbitae	Nos.	20	5	0	5
		b) Entomopathogenic fungi					
		i) Lecanicillium lecanii	kg	69	19	6	25
		ii)Beauveria bassiana	kg	69	19	6	25
		iv) Pseudomonas fluroscence	kg	45	19	6	25
		c) Neem oil	lit	10	6	4	10
6	Services/Facilitation						
	6.1	Animal/plant Health Camps	No				
	6.2	Artificial insemination	No				
	6.3	Vaccination	No				
	6.4	Veterinary services (Hospitalization, on-site treatment etc.)	No				
	6.5	Testing samples of Soil, plant, water, feed fodder and livestock	No				
	6.6	Promotion of agri-entrepreneurship	No				
	6.7	Promotion of IFS, IOFS,	No				
	6.8	Establishment of Natural Farming, Nutri-garden, kitchen garden, orchards etc.	No				
	6.9	Creation of market links of farm produces	no				
	6.10	Use of Institute facilities[Processing etc.}	Hours				
	6.11	Subsidies/Assistance (50% of project cost, Max. Rs 100O beneficiary}	No				
7	Publication/distribution of Literature		No	30	24	6	30
8	Employment generation for livelihood Man-months		No.				
9	Fellowship, Stipends or, Scholarship		No				
10	Area oriented & Activity (Project addressing the problems of agri .Sector faced by the SC/STs and benefit directly, which is		Projects (No)				

Sl No	Item/Activity		Units	Achievements (Activities/ Quantity)	ST Beneficiaries (No.)		
					Male	Female	Total
	measurable and Identifiable)						
11	Monitoring & Evaluation of DAPSC/ST(up to 3% budget)						
	11.1	Field visits	No.	18	138	46	184
	11.2	Field days	No.	1	28	14	42
12	Any others						
	12.1	Wild elephant repellent	No.				
	12.2	Khethi Rakshak 18-monkey repellent	No.				
	12.3	Goat mineral mixture	No.				
	12.4	Supplement-salt lich	No.				
	12.4	Success stories (one or two write-ups may be given below with photos)	No.				

15.10 Progress report of SCSP (DAPSC)

Sl No	Item/Activity		Units	Achievements (Activities/ Quantity)	SC Beneficiaries (No.)		
					Male	Female	Total
1	Training programmes		No				
	1.1	1-3 days	No	4	153	17	170
	1.2	4-10 days	No	-	-	-	-
	1.3	2-4 weeks	No	-	-	-	-
	1.4	More than 4 weeks	No	-	-	-	-
2	OFTs		No	-	-	-	-
3	FLDs		No.	216	185	31	216
4	Extension activities		No.				
	4.1	Awareness camps	No.	1	89	74	163
	4.2	Exposure visits/study tours					
	4.3	Exhibitions					
	4.4	Seminars					
	4.5	Workshops					
	4.6	Group meetings	No.	2	49	-	49
	4.7	Others specify	No.	27	174	18	192
5	Input supply						
	5.1	Seeds (Field crops)	Quintal	1.60	34	2	36
	5.2	Seeds (High value crops, spices etc.)	Kg	45			
	5.3	Seeds (Root & Tuber crops)	Quintal	-			
	5.4	Nursery plants	No.	60000			
	5.5	Cuttings, Slips, suckers etc.	No.	-			
	5.6	Mushroom spawns Packets (100 gm)	No.	-			
	5.7	Bio-fertilizers Packets (one kg)	No.	15.4	25	1	26
	5.8	Honeybee Colonies	No.				
	5.9	Animals -large					
		Cattle	No.				
		Buffaloes	No.				
		Calves	No.				
	5.10	Animals-Small	No				
		Pig	No				
		Sheep					
		Goat	No				
	5.11	Poultry					
		Ducklings	No				
		Poultry Chicks	No				
		Fish fingerlings					

Sl No	Item/Activity		Units	Achievements (Activities/ Quantity)	SC Beneficiaries (No.)		
					Male	Female	Total
	5.12	Equipment					
		Small equipment's (up to Rs 2000)	No.				
		Medium equipment's/machinery (Rs 25000)	No.				
		Large equipment's /machinery (> Rs.25000)	No.	2	0	0	0
	5.13	Infrastructure	No				
		Civil work/ ponds etc.	No				
		Setting up Plant Nursery/seed farm/hatchery	No				
		Land development/Reclamation/Conservation	Hectare				
	5.14	Fertilizers					
		Major nutrients NPK	Quintal	30	29	1	30
		Secondary nutrients	Quintal				
		Micronutrients	Quintal	2.02	25	1	26
		FYM	Quintal				
		Vermicompost	Quintal				
		Soil amendments (Gypsum, lime etc.)	Quintal				
	5.15	Plant protection					
		Plant protection chemicals	Kg				
		Plant growth promoters	Kg				
	5.16	Animal Feed mixture	Quintal	5.25	27	8	35
	5.17	Animal fodder	Quintal				
	5.18	Animal medicines provided to animals	No.	62	51	9	60
	5.19	Any other (specify)	No				
6	Services/Facilitation						
	6.1	Animal/plant Health Camps	No				
	6.2	Artificial insemination	No				
	6.3	Vaccination	No				
	6.4	Veterinary services (Hospitalization, on-site treatment etc.)	No				
	6.5	Testing samples of Soil, plant, water, feed fodder and livestock	No				
	6.6	Promotion of agri-entrepreneurship	No				
	6.7	Promotion of IFS, IOFS,	No				
	6.8	Establishment of Natural Farming, Nutri-garden, kitchen garden, orchards etc.	No				
	6.9	Creation of market links of farm produces	no				
	6.10	Use of Institute facilities[Processing etc.}	Hours				
	6.11	Subsidies/Assistance (50% of project cost, Max. Rs 100O beneficiary}	No				
7	Publication/distribution of Literature		No	200	165	35	200
8	Employment generation for livelihood Man-months		No.				
9	Fellowship, Stipends or, Scholarship		No				
10	Area oriented & Activity (Project addressing the problems of agri .Sector faced by the SC/STs and benefit directly, which is measurable and Identifiable)		Projects (No)				
11	Monitoring & Evaluation of DAPSC/ST(up to 3% budget)						
	11.1	Field visits	No.	23	128	23	151
	11.2	Field days	No.	2	70	35	105
12	Any others						

Sl No	Item/Activity		Units	Achievements (Activities/ Quantity)	SC Beneficiaries (No.)		
					Male	Female	Total
	12.1	Wild elephant repellent	No.				
	12.2	Khethi Rakshak 18-monkey repellent	No.				
	12.3	Goat mineral mixture	No.	25	24	1	25
	12.4	Supplement-salt lich	No.				
	12.4	Success stories (one or two write-ups may be given below with photos)	No.				

Success stories write-up :

DOUBLING THE INCOME OF FARMER THROUGH ADOPTION OF GREENGRAM VARIETY

Shri Sunil Laxman Pawar of Nagavi tanda village in Gadag block is one of the young farmer who participated in CFLD-Greengram programme under SCSP Project of KVK during 2024-25. He was very enthusiastic to adopt improved technologies to address productivity constraints in Blackgram. He used to cultivate Local Greengram variety. Incidence of Yellow Veins Mosaic Virus and powdery mildew were the major problems that affected the yield to the extent of 40-45 percent. Apart from this, there was also knowledge gap in management of pod borer and nutrient application. Demonstration was laid out in his farm under the supervision of KVK Scientists. Details of technologies demonstrated were use of high yielding and non-shattering variety (DGGV-2), seed treatment with Trichoderma, bio-fertilizers and foliear spray of pulse booster @ 1%. Local check was also laid out adjacent to the demonstrated plot. Shri Laxman adopted all the suggested technologies related to sowing method, seed rate, nutrition, intercultivation and management of pod borer. KVK Scientists periodically visited his plot and gave him timely suggestions. As a result of this, a very good crop was raised and all the farmers in the village visited this plot and learnt about the technologies adopted. The performance of demonstrated plot against local check is given below.

Performance of technologies in demonstration						
Yield (Q/ha)			Net returns (Rs./ha)			Yield gap (q/ha) over check
Demo	Check	% increase	Demo	Check	% increase	4.88
12.38	7.50	65.06	57225	25250	126.63	

Thus farmer could get 65.06% per cent increased yield and 126.63 per cent increased net income. His net income was almost doubled.

KVK Scientist interacting with the farmer

Field day organized on farmers' field

15.11 NARI : NIL

Activity	Achievement	
	Number of activity	No. of farmers/ beneficiaries
OFTs – Nutritional Garden (activity in no. of Unit)		
OFTs – Bio-fortified Crops (activity in no. of Unit)		
OFTs – Value addition(activity in no. of Unit/Enterprise)		
OFTs - Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
FLDs – Nutritional Garden (activity in no. of Unit)		
FLDs – Bio-fortified Crops (activity in no. of Unit)		
FLDs – Value addition(activity in no. of Unit/Enterprise)		
FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
Trainings		
Extension Activities		

15.12 KVK Portal

No. of Events added by KVKs	No. of Facilities added by KVKs	Filled Report on Package of Practices (Y/N)				Filled Profile Report (Y/N)							
		Crop	Livestock	Fisheries	Horticulture	Employees	Posts	Finance	Soil Health Cards	Appliances	Crops	Resources	Fish
3207	13	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y

15.13 KSHAMTA : NIL

Number of Adopted Villages	No. of Activities		No. of farmers benefited	
	Demo	Training	Demo	Training

15.14 Natural Farming

Sl No	Item/Activity	Units	Achievements (Activities/ Quantity)	Farmers (No.)		
				Male	Female	Total
1	Training programmes	No.	3	120	0	120
2	Technology demonstrations/Method demonstrations (specify below name of technology/demonstration)					
	Preparation of Jeevamruta, Bejaamruta	No.	4	90	25	115
3	Extension programmes/services (specify below name of activity)					
	Field visits	No.	8	13	5	18
4	Critical inputs provided (specify below name of input)					
	Plastic barrels for preparation of natural farming inputs	No.	48	12	0	12

15.15 Aspirational districts (Raichur, Yadgir and Wayanad)

Sl No	Item/Activity	Achievements (Activities/ Quantity)	Farmers (No.)		
			Male	Female	Total
1	Training programmes conducted for farmers				
2	Training programmes conducted for rural youth				
3	Training programmes conducted for farm women				
4	Sponsored/vocational training programmes conducted				
5	Technology demonstrations on pulse crops				
6	Technology demonstrations on oilseed crops				
7	Technology demonstrations other than pulse and oilseed crops				
8	Extension programmes				
9	EDP programmes conducted				
10	How many EDP units edtablished				
11	Input supply				
	Seeds				
	Planting materials				
	Bioproducts				
	Poultry chicks				
	Ducklings				
	Goat kids				
	Sheep kids				
	Piglings				
	FYM/Vermicompost				
	Others specify				
12	Services provided				
	Soil samples tested				
	Water samples tested				
	Plant samples tested				

	Mobile advisories				
	Vaccinations				
	Artificial Insemination				
	Others specify				

15.16 CFLDs on Oilseed Model Villages (Belagavi-II, Bidal, Bagalkote, Tumakuru-II, Chikkaballapura, Yadgir,)

Season	Crop	Variety		Conducted		Demo Yield(Q/ha)			Check Yield (Q/ha)	Economics					
										Demo			Check		
		Demo	Check	Demos(No)	Area (ha)	Max	Min	Avg		Gross income	Net income	BCR	Gross income	Net income	BCR

15.17 CFLDs on Pulses Model Villages (Belagavi-II, Kalaburagi-II, Mandya, Mysuru, Vijayapura-I)

Season	Crop	Variety		Conducted		Demo Yield(Q/ha)			Check Yield (Q/ha)	Economics					
										Demo			Check		
		Demo	Check	Demos (No)	Area (ha)	Max	Min	Avg		Gross income	Net income	BCR	Gross income	Net income	BCR

PART XVI - FARMERS FEEDBACK ON ASSESSED/DEMONSTRATED TECHNOLOGIES OF CROPS / LIVESTOCK

16.1 Farmers feedback on performance of crop varieties/hybrids

Sl. No.	Crop varieties/hybrids assessed/ demonstrated	Farmer's feedback
1	**Groundnut** • GPBD-4	- Early maturity - Two seeded pods - Resistant to rust and late leaf spot
2	• DGGV-2	• High yielding • Non shattering • Taller canopy • Suitable for mechanical harvesting

Sl. No.	Crop varieties/hybrids assessed/ demonstrated	Farmer's feedback
4	**Green Chilli**	• Arka Yashasvi : Fruits of Arka Yashasvi are long and thick and light green colour fetches less price compared to Arka Tanvi and local hybrids and it is tolerant to ChilLCV compared to Local variety. Arka Tanvi: Fruits of Arka Tanvi are long and thin with attractive dark green colour, less incidence of chiLCV and preferred in Gadag city market. Therefore farmers accepted Arka Tanvi Green Chilli Hybrid.
5	**Okra hybrids**	• Arka Nikita: High yielder, moderatelt tolerant to YVMV disease, fruits have demand in the market with good coocking quality
6	**Onion** Bheema Super	• Bheema Super have good bulb weight with 20.87% increase in the yield. Bulbs are attractive with light pink colour fetches Rs.750- 800/- more per quintal compared to local variety Ballary Red.
7	**Chilli** Rudra	• Pure seeds of Byadagi Dabbi (Rudra variety) supplied to farmers are very good, farmers saved the seeds for next season • More yield and tolerant to pest and disease incidence

16.2 Farmers feedback on performance of agronomic practices

Sl. No.	Agronomic practices	Farmer's feedback
1	Seed treatment of Trichoderma in Groundnut	Helps to reduce Root rot disease
2	Seed treatment with Biofertilizers like Rhizobium and PSB	Helps to reduce use of nitrogenous and phosphatic fertilizers
3	Use of pulse magic in Greengram	Foliar spray of Pulse magic in Greengram at flowering stage helped in healthy growth of plant without any deficiency symptoms besides increasing number of pods per plant. This practice resulted in higher grain yield.
4	Seed treatment with Rhizobium and PSB	Higher seedling vigor
5	Foliar spray of Pulse magic	Increased pod setting and higher yield
7	Seed treatment of Trichoderma in chilli	Helps to reduce Root rot disease
8	Adoption of border crop and trap crops in ByadagiChilli	• Maize as border crop and Marigold as trap crop resulted in less incidence of sucking pest and fruit borer respectively

Sl. No.	Agronomic practices	Farmer's feedback
	Use of Arka Vegetable Special at 40, 60 and 80 days after sowing in vegetables, Red Onion and Red Chilli	**Vegetables** • Application of Arka Vegetable Special resulted in better crop growth without much micronutrient deficiency. • Ridgegourd- Elongated fruits with malformation • Spinach - lessoccurence of Iron deficiency resulted in healthy and dark green leaves **Onion** • Application of Arka Vegetable Special helped to get large and dark pink coloured bulbs **Chilli** • Application of Arka Vegetable Special (Micornutrient mixture) resulted in better flower and fruit set and dark red coloured fruits **Okra** • Application of Arka Vegetable Special (Micornutrient mixture) resulted in better crop stand, good flower and fruit set with no misshaped fruits.

16.3 Farmers feedback on performance of pest and disease management in crops

Sl. No.	Pest and disease management in crops	Farmer's feedback
1	Groundnut	Collar rot and Leaf spot diseases were identified in groundnut crop. Integrated management practices like seed treatment with fungicides, crop rotation practices, summer ploughing and green manuring along with chemical management practices helped to reduce collar rot and leaf spot incidence in groundnut crop.
2	Greengram	Major pests like thrips, Aphids and Pod borer and incidence of disease like powdery mildew were noticed during cultivation. Adoption of Integrated crop management practices in demonstrated plots helped in reduction of pest and disease occurrence.
3	Seed treatment with Trichoderma	Low incidence of soil borne fungal diseases
4	Seed treatment of *Trichoderma viride* and Imidachloprid in Byadagi Chilli	Helped to reduce seedling rot and incidence of sucking pests at early vegetative growth stage
5	Seed treatment of *Trichoderma viride* in onion	Helped to reduce seedling rot disease in main field
6	Pest and disease management in Byadagi chilli crop	Foliar spray of ***Lecanicillium lecanii*** **@5g and** ***Beauveria bassiana*** **5g/lit against thrips and of** ***Pseudomonas fluroscence*** **@ 5gm/lit for t**imely management of anthracnose, Murda complex disease lead to get 25.93% additional yield compared to local practices

16.4 Farmers feedback on performance of farm machinery technologies

Sl. No.	Farm machinery technologies	Farmer's feedback
	Tractor Operated Groundnut Digger cum Elevator	• The equipment performs uprooting, elevating and windrowing of groundnut plants • It can reduce the drudgery of operation involved

Sl. No.	Farm machinery technologies	Farmer's feedback
		in manual uprooting and collection of plants in traditional method Requires periodic clearing of entangled plants while in operation
	Tractor Operated Compartmental Bund Former	• Compartmental bunding helps in conservation of soil moisture for getting higher yield. • Can be used for rain water harvesting during kharif and rabi seasons.
	Solar Nipping Machine	• Solar nipping machine works effectively for nipping of chickpea. • There is no need of special skills to operate this machine
	Engine Operated Weeder	• Suitable weeding equipment for small and marginal farmers • Resulted in reduction in labour requirement and cost of operation • Can be used for weeding in multiple field crops Requires periodical maintenance of engine parts
	Battery Operated Onion Detopper	• Battery operated Onion Detopper resulted in reduction of drudgery involved in manual detopping method. • There was significant saving in labour requirement and time of operation.

16.5 Farmers feedback on performance of livestock and fisheries technologies

Sl. No.	Livestock/fisheries technologies	Farmer's feedback
1	CB Cows	Feeding of green fodder enhances the milk yield and improves the health of the CB cows

PART XVII - FINANCIAL PERFORMANCE

17A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	-	-	-	-	-	-	-
With KVK	SBI	Gadag	0838	KHP KVK Hulkoti	10824829153	582002002	SBIN0000838

17B. Utilization of KVK funds during the year 2024-25 (Up to December 2024)

S.No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	1950000	14662438	12876443
2	**Traveling allowances**	190000	50000	37154
3	**Contingencies**			
A	**Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)**	300000	262500	325342
B	**POL, repair of vehicles, tractor and equipments**	328000	300000	374965
C	**Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)**	40000	25000	21300
D	**Training material (posters, charts, demonstration material including chemicals**	10000	5000	2185

S.No.	Particulars	Sanctioned	Released	Expenditure
	etc. required for conducting the training)			
E	**Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)**	280400	250000	280400
F	**On Farm Testing (on need based, location specific and newly generated information in the major production systems of the area)**	46600	30000	46600
G	**Integrated Farming System**			
H	**Training of Extension Functionaries**	0		
I	**Extension activities**	40000	30000	36450
J	**Farmers' Field School**			
K	**EDP / Innovative activities**			
L	**Maintenance of buildings**	50000	30000	17100
M	**Maintenance of Farm**			
N	**Maintenance of Soil, Plant & Water Testing Laboratory and issue of Soil Health Cards**	25000	10000	10000
O	**Nutri Garden**	15000	10000	10000
P	**Library Maintenance**	15000	10000	13490
Q	**SCSP Programme**	957000	718450	718450
R	**TSP Programme**	300000	200000	162600
TOTAL (A)		**22157000**	**16593388**	**14932689**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments (Farm)**	300000	300000	0
3	**Vehicle** (Four wheeler)			
4	**SCSP Programme**	244000	181300	201300
TOTAL (B)		**544000**	**481300**	**201300**
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**22701000**	**17074688**	**15133989**

17C. Status of revolving fund (Rs. in lakh) for the last three years

Year	Opening balance as on 1st January	Income during the year	Expenditure during the year	Net balance in hand as on 31st December of each year
January to December 2022	5.19	15.16	15.49	4.86
January to December 2023	4.86	16.04	16.37	4.53
January to December 2024	4.53	28.08	33.19	-0.58

18. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. Sudha V. Mankani	Senior Scientist and Head (I/c)	Inter zonal workshop Kisan Samruddhi & visit to KLE KVK, Belagavi	KLE KVK, Belagavi II and Kolhapur KVK	19-20, July 2024
		KVKs zonal workshop on strengthening of KVKs for production of bio-inputs, seeds and seedlings	IISR, Calicut	02-04, September 2024
Mr. N.H.Bhandi	SMS (Soil Science)	Training cum exposure visit on natural farming for master trainers	UAS, Dharwad	12-16, March 2024
		Participatory extension approaches for climate risk management	CRIDA & MANAGE, Hyderabad	17-19, September 2024
Mrs. Hemavati R.H.	SMS (Horticulture)	Master trainers - Krishi Sakhi - Natural farming	MANAGE, Hyderabad	20-22, February 2024
		Regional Consultation on Science and Natural farming	Yashada, Pune, Maharashtra	16, May 2024
		Conference on expanding the Horizons of Microbial Research in Agriculture	NBAIR, Bengaluru & NBAIM, Mau, UP	06-14, June 2024
		e-sap training for experts	UAS, Raichur (Online)	29, July 2024
		National level webinar on Kamalam fruit production and value addition	ICAR-IIHR, Bengaluru (Online)	25, September 2024
		Nutrition and Terrace gardening	Institute for Studies on Agriculture and Rural Development, Dharwad	09, November 2024
Dr. B.M.Murgod	Programme Assistant (Animal Science)	Leveraging together : Animal feed industry and researchers towards doubling of farmers income	National Institute of Animal Nutrition and Physiology, Adugodi, Bengaluru	22, March 2024
		Enhancing fodder production in coastal eco system of India : Present status and future prospects	ICAR Indian Grass Land and Fodder Research Institute, Jhansi	07, November 2024
Dr. Vinayak Niranjan	SMS (Ag. Engineering)	Women entrepreneurship conclave	KAU, Thrissur	20-21, January 2024
		Webinar on 'Stakeholders comutation on transforming agriculture research'	Dept. of Agriculture and Farmers Welfare (Online)	03, September 2024

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
		Webinar on 'Application of discrete element modelling in agriculture'	Indian Society of Agricultural Engineers (Online)	26, September 2024
		Irrigation systems and advancements	NIPHM, Hyderabad (Online)	07-09, October 2024
		Webinar on "KVK Impact Acceleration Series"	ATARI, Zone-XI, Hyderabad (Online)	18, October 2024
		National workshop on Carbon Credits in Agriculture	MANAGE, Hyderabad	13, November 2024

19) Please include any other important and relevant information which has not been reflected above (write in detail)