

ICAR-KRISHI VIGYAN KENDRA, GADAG

ANNUAL REPORT – 2019-20

(FOR THE PERIOD FROM 01 April 2019 TO 31 March 2020)

**ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti
Gadag district, Karnataka State
Pincode: 582205**

Host Organisation: Agricultural Science Foundation, Hulkoti

PART I - GENERAL INFORMATION ABOUT THE KVK**1.1. Name and address of KVK with phone, fax and e-mail**

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR-K.H.Patil Krishi Vigyan Kendra, Hulkoti, Gadag dist.	(08372)289606 /289325	-	kvk.Gadag@icar.gov.in kvkhulkoti@gmail.com	www.khpkvk.org

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) 289069	-	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. L.G. Hiregoudar	-	9448358772 8073642868	laxs1961@gmail.com

1.4. Year of sanction: 1985**1.5. Staff position as on 31 March 2020**

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M / F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Head/ Senior Scientist	Dr. L.G. Hiregoudar	Programme Coordinator	M	Crop Physiology	M.Sc (Agri), PhD	37400-67000+10000	67000	05.09.1985	P	OBC
2	Scientist /SMS	Mr. S.K. Mudlapur	Subject Matter Specialist	M	Plant Protection	B.Sc (Agri)	15600-39100+7600	36280	26.09.1994	P	OBC
3	Scientist /SMS	Mr. S.H. Adapur	Subject Matter Specialist	M	Ag. Extension	M.Sc (Agri)	15600-39100+7600	35030	23.06.1995	P	Others
4	Scientist /SMS	Dr. Sudha V. Mankani	Subject Matter Specialist	F	Home Science	M.H.Sc, PhD	15600-39100+7600	35030	26.06.1995	P	OBC
5	Scientist /SMS	Mr. V.D. Vaikunthe	Subject Matter Specialist	M	Agronomy	B.Sc (Agri)	15600-39100+7600	35030	01.07.1995	P	OBC
6	Scientist /SMS	Mr. N.H. Bhandi	Subject Matter Specialist	M	Soil Science	M.Sc (Agri)	15600-39100+6000	27490	01.06.2005	P	OBC
7	Scientist /SMS	Ms. H.R.Hiregoudar	Subject Matter Specialist	F	Horticulture	M.Sc (Horti)	15600-39100+5400	15600	14.02.2020	P	OBC
8	Programme Assistant (Lab Tech.)	Dr. B.M. Murgod	Programme Assistant	M	Animal Science	B.V. Sc	9300-34800+4600	17100	25.06.2007	P	Others

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M / F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
9	Programme Assistant (Computer)	Mrs. L.S.Asuti	Computer Programmer	F	-	M.Sc (IT)	9300-34800+4600	18430	01.06.2005	P	OBC
10	Programme Assistant / Farm Manager	Mr. Suresh L. Halemani	Farm Manager	M	-	B.Sc (Agri.)	9300-34800+4200	14120	01.02.2011	P	OBC
11	Assistant	Mr. M.B. Jakkanagoudar	Assistant	M	-	M.Com	9300-34800+4600	17100	25.06.2007	P	OBC
12	Jr. Stenographer	Mr. T.K. Sai Swaroop Rao	Jr. Stenographer	M	-	SSC & Certificate in Stenography	5200-20200+2400	5670	15.12.2016	P	OBC
13	Driver - 1	Mr. N.L. Hadapad	Driver-Cum-Mechanic	M	-	7th Std.	5200-20200+2400	13690	03.09.1992	P	OBC
14	Driver - 2	Mr. G.D. Madivalar	Driver-Cum-Mechanic	M	-	7th Std.	5200-20200+2400	12320	26.06.1995	P	OBC
15	SS-1	Mr. V.R. Navalli	Field Assistant	M	-	SSLC	5200-20200+2400	10700	20.07.1993	P	OBC
16	SS-2	Mrs. S. V. Karadani	Field Assistant	F	-	PUC	5200-20200+1800	5200	14.02.2020	P	OBC

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

S. No.	Item	Area (ha)
1.	Under Buildings	1.5
2.	Under Demonstration Units	0.5
3.	Under Crops	12.0
4.	Orchard/Agro-forestry	14.0
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)	2009	6.00	198214	Good
Tractor	2003	5.00	10426 Hrs	Need replacement
Motor cycle - I	2004	0.40	70513	Good
Motor cycle - II	2009	0.50	55193	Good

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs. in lakhs)	Present status
Computer	2008	1.00	Good
Digital Amplifier with Public Address System	2013	0.36	Good
OHP	2004	0.25	Good
Motorised projection screen	2013	0.21	Good
White board	2013	0.14	Good
LED display board	2013	0.10	Good
Hipro lab model gin machine	2006	0.70	Good
Seed delinting machine	2006	0.18	Good
Cotton seed sorter	2007	0.50	Good
Seed treatment drum	2007	0.40	Good
Lap top Computer	2007	0.53	Not Good
LCD	2007	0.45	Good
Ceramic black board	2007	0.12	Good
Rotavator	2008	0.75	Good
Rotary weeder	2009	0.84	Good
Laser guided land leveler	2011	3.89	Good
Power tiller	2011	2.72	Good
Lab equipments for dairy and goatery	2011	0.50	Good
Generator	2011	1.00	Good
EPBAX system	2011	0.50	Good
Equipments of Plant health diagnostic unit	2011	10.00	Good
Laptop computer	2016-17	0.589	Good
Desktop computer	2016-17	0.25	Good
Printer	2016-17	0.181	Good
Copier	2016-17	0.595	Good
Projector	2016-17	0.48	Good
Digital camera	2016-17	0.242	Good
Pico projector	2016-17	0.145	Good
Amplifier	2016-17	0.055	Good
Class room chairs	2016-17	0.21	Good
File cabin	2016-17	0.20	Good
Hostel furniture	2016-17	0.59	Good

1.8. Details of SAC meeting conducted during 2019-20

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
07-03-2020	17	Popularize the Solar/Battery Operated Nipping Machine in Redgram and Chickpea under NFSM on Pulse crops, so as to enhance yield levels through nipping before flowering of the crop.		The recommendations are for the year 2020-21 and these are included in the Action Plan of 2020-21
		Give special emphasis for rust management in Chickpea under FLDs and Cluster FLDs as this disease is very severe during this year.		
		Advise farmers growing Onion to control weeds through spray of Pendimethalin 30 EC @ 1 liter / acre as pre-emergent and Oxiflorofen 23.5 EC @ 1.5 ml/lit at 45 days after sowing in case of labor scarcity.		
		Popularize usage of compost culture among farmers.		
		Popularize bee-keeping among farmers by establishing demonstration units at KVK farm.		
		Conduct awareness programmes for district farmers on using appropriate Bt.Cotton Hybrids by taking advise from UAS, Dharwad.		
		Advise farmers to grow African Tall Maize during Kharif and Fodder Oats during Rabi Season so as to address the fodder scarcity in Gadag district.		
		Advise farmers on value addition to dry fodder. Add mineral mixture to treated dry fodder.		
		Advise farmers on Silage making so as to use the same during lean periods.		
		Advise farmers about growing fodder trees on field bunds so as to make fodder available to animals.		
		Joint Director of Agriculture suggested for collaborative activities with KVK in collecting and analysis of soil samples and later in issuing Soil Health Cards.		
		Take up on-farm trial in Groundnut crop to test new varieties.		
		Deputy Director, AH & VS requested for organizing Animal Health Camps jointly with KVK.		
Popularise growing Sesamum and Linseed in Gadag district.				

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
		Try less moisture requiring crops like Coriander, Ajwain and Cumin in this drought prone district.		The recommendations are for the year 2020-21 and these are included in the Action Plan of 2020-21.
		Develop few cropping patterns in KVK Farm which can double the income.		
		Take up a trail on Bunch Groundnut in Mulagund area of Gadag block as farmers are getting very low yields due to small sized low weight pods since 3-4 years.		
		Compare Safflower new variety ISF-764 with A-1 variety with respect to yield and oil content through OFT (On-Farm Trial).		
		Deputy Director, Sericulture Department offered his Department's collaboration in conducting trainings and in developing model Mulberry tree orchard at KVK. He suggested to popularize Sericulture among Organic Farmers.		
		Take up increased quantity of seed production in Onion and Chilli crops.		
		Take up plant propagation in Guava (Arka Kiran variety), Jasmine (Kakada variety), Mango and Cashewnut crops.		
		Advise farmers to grow Tamarind, Jamun, Custard Apple etc., so as to enhance area under these crops. Also advise for value addition in these crops.		
		Take up demonstrations of Tomato varieties Arka Rakshak and Arka Samrat.		
		Provide seeds of latest vegetables varieties to farmers.		
		Demonstrate Solar Dryer for Chilli/Vegetables etc., to farmers, so that the farmers can avail 40% subsidy for Solar Dryers from Horticulture Department.		
		Provide Agro-met advisories to farmers from University through KVK.		
		Develop IFS Model in ½ acre land based on Farm Pond water.		
		Demonstrate Sunhemp crop new variety in the district as it is very valuable in industry.		
		Take up diagnostic visits at road side villages while travelling to KVK adopted villages and provide advisories to those villages also.		
		Send feedback of OFTs and FLDs to technologies generating Institutes like Agricultural University / ICAR Research Institutes.		

PART II - DETAILS OF DISTRICT

2.1 Major 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

2.2 Description 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 ^o 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 Shirahatti and Laxmeshwar blocks. Average rainfall is 619 mm. Gets rainfall from both South-West and North-East monsoons. Kharif crops grown: Greengram, Sorghum, Bt-cotton, Groundnut, Sunflower, Millets, Maize, Onion, Chilli etc 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: 2015-16)**

Sl. No	Crop	Area (ha)	Production (Metric tons)	Productivity (Kg /ha)
	Cereals			
1	Maize (Protected irrigation)	55364	184140	3326
2	Rabi Sorghum	62967	39606	629
3	Wheat (Irrigated)	16757	22504	1343
	Pulses			
4	Greengram	57368	25012	436
5	Bengalgram	85005	53893	634
6	Redgram	1540	870	565
	Oilseeds			
7	Groundnut	43433	27493	633
8	Sunflower	42025	19205	457
	Commercial crops			
9	Bt. Cotton	17812	13091	735
10	Onion	37227	152258	4.09 tonns
12	Dry chillies	12382	6339	512

Source: District Statistical Office

2.5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
January, 2019	00.3	34.20	00.00	52.08
February, 2019	00.2	39.50	10.30	51.97
March, 2019	02.9	41.20	11.30	53.48
April, 2019	22.4	43.30	17.10	54.92
May, 2019	30.8	42.90	21.00	52.49
June, 2019	79.0	41.50	19.20	65.54
July, 2019	91.1	36.10	8.00	74.00
August, 2019	132.9	34.30	19.40	75.00
September, 2019	97.5	35.20	18.00	69.22
October, 2019	206.0	34.00	18.30	72.95
November, 2019	30.90	33.80	14.40	68.38
December, 2019	02.90	34.30	13.80	66.18

* Source: KSDA, Gadag and Karnataka State Natural Disaster Monitoring Centre, Bengaluru

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	15418	25968 Lit. of milk/day	5.22 Kg/day
<i>Indigenous</i>	158588	45944 Lit of milk/day	2.40 Kg/day
Buffalo	80234	64088 Lit. of milk/day	2.80 Kg/day
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>	313459	158 tons/year (meat)	15 Kg/animal
Goats	172411	134 tons/year (meat)	16 Kg/animal
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry birds (egg production)	158656	72 lakh/year	100 per year

Source: District Statistical Office Reference year: 2013-14

Note: The data for the year 2019 is not available at District Statics Office / Office of Deputy Directory of AH & VS

2.7 District profile has been **Updated** for 2019 : 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	Shirol	Since one year (Since 2019-20)	Crops: Bt.Cotton, Maize, Foxtail millet, vegetable crops & flower crops Enterprise: CB Cows	Bt. Cotton : <ul style="list-style-type: none"> • Low income due to mono cropping • Incidence of sucking pest & mirid bug • Incidence of leaf spot & leaf reddening • Drudgery in harvesting 	<ul style="list-style-type: none"> • Demonstration of Bt. Cotton + Greengram (1:1) intercropping system • Demonstration of cotton harvesting bag • Training on ICM in Bt.Cotton + Greengram • Training on IPM in Bt. Cotton • Supply of literature • Conductance of Field day
					Maize : <ul style="list-style-type: none"> • Low income due to mono cropping • Imbalanced nutrition • Incidence of army worm • Incidence of Turcicum leaf blight • Drudgery during threshing and winnowing of Maize 	<ul style="list-style-type: none"> • Demonstration on Maize + Redgram (4:2) intercropping system • Training on ICM in Maize+Redgram intercropping system • Training on IPM in Maize • Supply of literature • Demonstration on functional clothing kit • Conductance of Field day • Training on drudgery reduction
					Foxtail millet : <ul style="list-style-type: none"> • Low productivity due to cultivation of local variety • Lack of awareness on importance of millet and value addition 	<ul style="list-style-type: none"> • Demonstration of high yielding DHFt-109-3 foxtail millet variety • Training on production technology of millet crops • Training on importance of millets in diet • Supply of literature • Conductance of Field day
					Vegetable crops : <ul style="list-style-type: none"> • Low income due to cultivation of local varieties 	<ul style="list-style-type: none"> • Demonstration of new varieties of ICAR-IIHR, Bengaluru in vegetable crops

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
						<ul style="list-style-type: none"> • Training on ICM in vegetable crops • Supply of literature • Conductance of Field day
					<p>Flower crops :</p> <ul style="list-style-type: none"> • Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) • Low yield is also due to incidence of bud borer pest and leaf spot diseases 	<ul style="list-style-type: none"> • Demonstration on ICM in Chrysanthemum and Gaillardia • Training on ICM in flower crops • Supply of literature • Field day
					<p>Dryland horticulture :</p> <ul style="list-style-type: none"> • Less profit from existing cropping pattern due to vagaries of monsoon and lack of crop diversification 	<ul style="list-style-type: none"> • Demonstration of Agri-horticulture system with Cashew crop • Training on tree based farming system • Supply of literature
					<p>Borewell :</p> <ul style="list-style-type: none"> • Decreased ground water level and less water availability for irrigation 	<ul style="list-style-type: none"> • Training on recharge of ground water through borewell • Supply of literature • Field visit and interactive meetings at site
					<p>CB Cows:</p> <ul style="list-style-type: none"> • Low productivity of milk due to non-availability of green fodder throughout the year. 	<ul style="list-style-type: none"> • Demonstration on fodder and azolla production, Hydroponic fodder production and silage making • Supply of literature • Field day
					<ul style="list-style-type: none"> • Nutrition and health 	<ul style="list-style-type: none"> • Demonstration on nutri-farms for year round nutritional security among farm families • Training on balanced diet and nutrition • Training on healthy foods for healthy life

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
						<ul style="list-style-type: none"> • Training on importance of millets in diet
					Grain storage : <ul style="list-style-type: none"> • Incidence of stored grain pest 	<ul style="list-style-type: none"> • 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
2	Mundaragi block	Shingataray ankeri	Since one year (Since 2019-20)	Crops: Greengram, Bt.Cotton, Maize, Foxtail millet, Spreading Groundnut, vegetable crops & flower crops Enterprise: CB Cows	Bt. Cotton : <ul style="list-style-type: none"> • Low income due to mono cropping • Incidence of sucking pest & mirid bug • Incidence of leaf spot & leaf reddening • Drudgery in harvesting 	<ul style="list-style-type: none"> • Demonstration on Bt. Cotton + Greengram (1:1) intercropping system • Training on ICM in Bt.Cotton + Greengram • Training on IPM in Bt. Cotton • Supply of literature • Demonstration on cotton harvesting bag • Field day
					Maize : <ul style="list-style-type: none"> • Low income due to mono cropping • Imbalanced nutrition • Incidence of army worm • Incidence of Turcicum leaf blight • Drudgery during threshing and winnowing of Maize 	<ul style="list-style-type: none"> • Demonstration on Maize + Redgram (4:2) intercropping system • Training on ICM in Maize+Redgram intercropping system • Training on IPM in Maize • Supply of literature • Demonstration on Functional Clothing Kit • Field day
					Foxtail millet : <ul style="list-style-type: none"> • Low productivity due to cultivation of local variety 	<ul style="list-style-type: none"> • Demonstration of high yielding DHFt-109-3 foxtail millet variety • Training on production technology of millet crops • 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
					Spreading Groundnut : <ul style="list-style-type: none"> • Low yield is due to incidence of leaf minor and leaf spot 	<ul style="list-style-type: none"> • Training on ICM practices in Spreading Groundnut
					Greengram : <ul style="list-style-type: none"> • Low yield due to incidence of powdery mildew 	<ul style="list-style-type: none"> • Demonstration on ICM practices in Greengram • Training on ICM practices in Greengram • Supply of literature • Field day
					Vegetable crops : <ul style="list-style-type: none"> • Low income due to cultivation of low yielding local varieties 	<ul style="list-style-type: none"> • Demonstration of new varieties of ICAR-IIHR, Bengaluru in vegetable crops • Training on ICM practices in vegetable crops • Supply of literature • Field day
					Flower crops : <ul style="list-style-type: none"> • Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) • Low yield is also due to incidence of bud borer pest and leaf spot diseases 	<ul style="list-style-type: none"> • Demonstration on ICM practices in Chrysanthemum and Gaillardia • Training on commercial flower crops • Supply of literature • Field day
					Dryland horticulture : <ul style="list-style-type: none"> • Less profit from existing cropping pattern due to vagaries of monsoon and lack of crop diversification 	<ul style="list-style-type: none"> • Demonstration of Agri-horticulture system with Cashew crop • Training on tree based farming system • Supply of literature
					CB Cows <ul style="list-style-type: none"> • Low productivity of milk due to non-availability of green fodder throughout the year. 	<ul style="list-style-type: none"> • Demonstration on fodder and azolla production • Supply of literature on Fodder & Azolla production • Field day on fodder production

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
					Nutrition and health <ul style="list-style-type: none"> • Less consumption of fruits and vegetables 	<ul style="list-style-type: none"> • Demonstration on nutri-farms for year round nutritional security among farm families • Training on balanced diet and nutrition • Training on healthy foods for healthy life • Training on importance of millets in diet
					Grain storage <ul style="list-style-type: none"> • Incidence of stored grain pest 	<ul style="list-style-type: none"> • 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
3	Shirahatti	Chikkasavanur	Since one year (Since 2019-20)		Maize: <ul style="list-style-type: none"> • Low income due to mono cropping • Imbalanced nutrition • Incidence of army worm • Incidence of Turcicum leaf blight • Drudgery during threshing and winnowing of Maize 	<ul style="list-style-type: none"> • Demonstration of Maize + Redgram (4:2) intercropping system • Training on ICM practices Maize+Redgram intercropping system • Training on IPM practices in Maize • Supply of literature • Demonstration on Functional clothing kit • Field day
					Foxtail millet : <ul style="list-style-type: none"> • Low productivity due to cultivation of local variety • Lack of awareness on importance of millet and value addition 	<ul style="list-style-type: none"> • Demonstration of high yielding DHFt-109-3 foxtail millet variety • Demonstration of millet papad • Training on production technology of millet crops • 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
					Spreading Groundnut : <ul style="list-style-type: none"> • Low yield due to incidence of leaf minor and leaf spot 	<ul style="list-style-type: none"> • Training on ICM practices in Spreading Groundnut
					Summer Groundnut : <ul style="list-style-type: none"> • Incidence of leaf minor and leaf spot reduce the yields 	<ul style="list-style-type: none"> • Demonstration on ICM practices in summer groundnut (NMOOP) • Training on pest and disease management • Supply of literature • Field day
					Greengram : <ul style="list-style-type: none"> • Low yield due to incidence of powdery mildew 	<ul style="list-style-type: none"> • Demonstration on ICM practices in Greengram with DDGV-2 variety • Training on ICM practices in Greengram
					Vegetable crops : <ul style="list-style-type: none"> • Low income due to cultivation of low yielding local varieties 	<ul style="list-style-type: none"> • Demonstration of new varieties of ICAR-IIHR, Bengaluru in vegetable crops • Training on ICM in vegetable crops • Supply of literature • Field day
					White Onion : <ul style="list-style-type: none"> • Low productivity due to cultivation of low yielding local variety 	<ul style="list-style-type: none"> • Assessment of White Onion varieties • Training on production technology in white onion
					Flower crops : <ul style="list-style-type: none"> • Low quality and low yields are due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) • Low yield is also due to incidence of bud borer pest and leaf spot diseases 	<ul style="list-style-type: none"> • Demonstration on ICM practices in Chrysanthemum and Gaillardia • Training on commercial flower crops • 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
					Dryland horticulture : <ul style="list-style-type: none"> • Less profit from existing cropping pattern due to vagaries of monsoon and lack of crop diversification 	<ul style="list-style-type: none"> • Demonstration of Agri-horticulture system with Cashew crop. • Training on tree based farming system • Supply of literature
					Sericulture : <ul style="list-style-type: none"> • Low quality mulberry leaves reduce cocoon yields 	<ul style="list-style-type: none"> • Demonstration on organic input production and usage in mulberry crop
					CB Cows : <ul style="list-style-type: none"> • Low productivity of milk due to non-availability of green fodder throughout the year. 	<ul style="list-style-type: none"> • Demonstration on fodder and azolla production • Supply of literature on Fodder & Azolla production • Field day on fodder production
					Nutrition and health : <ul style="list-style-type: none"> • Less consumption of fruits and vegetables 	<ul style="list-style-type: none"> • Demonstration on nutri-farms for year round nutritional security among farm families • Training on balanced diet and nutrition • Training on importance of millets in diet
					Grain storage: Incidence of stored grain pest	<ul style="list-style-type: none"> • 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
4	Naragund	Kalakeri	Since one year (Since 2019-20)		Greengram: <ul style="list-style-type: none"> • Low productivity due to usage of low yielding local variety • Incidence of yellow mosaic virus • Incidence of powdery mildew • Incidence of Spital bug and pod borer 	<ul style="list-style-type: none"> • Demonstration on ICM practices in DGGV-2 variety in Greengram • Training on ICM practices 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 : <ul style="list-style-type: none"> • Low yield due to cultivation of low yielding local variety • Low yield due to incidence of wilt & rust and incidence of pod borer 	<ul style="list-style-type: none"> • Assessment of BGD-111 and DBGV-204 varieties • OFT on assessment of seed treatment with Trichoderma and soil treatment with Trichoderma, neem cake and FYM for wilt control • Training on ICM in Bengalgram • Supply of literature • Field day
					Red Onion : <ul style="list-style-type: none"> • Low productivity due to cultivation of low yielding local variety • Incidence of thrips reduces the yields 	<ul style="list-style-type: none"> • Assessment of Bhima Super variety • Training on ICM in Red Onion • Supply of literature • Field day
					Rabi Sorghum : <ul style="list-style-type: none"> • Low productivity due to usage of local variety • Incidence of smut disease • Incidence of shoot fly and stem borer 	<ul style="list-style-type: none"> • Demonstration on ICM practices in SPV-2217 variety • Training on ICM practices in Rabi Sorghum • Supply of literature • Field day
					Drudgery : <ul style="list-style-type: none"> • Drudgery in farm activities 	<ul style="list-style-type: none"> • Training on drudgery reducing equipments in farm activities
					Nutrition and health : <ul style="list-style-type: none"> • Less consumption of millets, fruits and vegetables in daily diet 	<ul style="list-style-type: none"> • Training on health and nutrition, importance of millets in diet
					Grain storage <ul style="list-style-type: none"> • Incidence of stored grain pest 	<ul style="list-style-type: none"> • 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

Details of Benchmark Information collected from DFI villages

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
1	Gadag	Gadag	Shirol	Maruti Shivappa Walikar	90000	81600	8400
2	Gadag	Gadag	Shirol	Veeranagouda Mahadevagouda Doddagouda	75600	51600	24000
3	Gadag	Gadag	Shirol	Holalendragouda Veeranagouda Sannagoudar	62400	52800	9600
4	Gadag	Gadag	Shirol	Virupaxagouda Mallanagouda Patil	50000	40000	10000
5	Gadag	Gadag	Shirol	Basayya Veerayya Hiremath	90000	60000	30000
6	Gadag	Gadag	Shirol	Devendragouda Channabasanagouda Patil	150000	90000	60000
7	Gadag	Gadag	Shirol	Kuberagouda Veerabhadragouda Doddagoudra	100000	70000	30000
8	Gadag	Gadag	Shirol	Channabasavanagouda Gurunagouda Patil	44400	28800	15600
9	Gadag	Gadag	Shirol	Shankaragouda Virupaxagouda Patil	78000	60000	18000
10	Gadag	Gadag	Shirol	Gurayya Kotrayya Dandin	64800	54000	10800
11	Gadag	Gadag	Shirol	Basanagouda Mahantagouda Goudar	300000	250000	50000
12	Gadag	Gadag	Shirol	Channabasanagouda Basanagouda Doddagoudra	100000	75000	25000
13	Gadag	Gadag	Shirol	Parameshappa Virupaxappa Ramagiri	50000	40000	10000
14	Gadag	Gadag	Shirol	Shivanandayya Rudrayya Dandin	150000	130000	20000
15	Gadag	Gadag	Shirol	Yallappa Durgappa Durgappanavar	80000	65000	15000

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
16	Gadag	Gadag	Shirol	Rudragouda Fakirgouda Doddagoudar	76800	40800	36000
17	Gadag	Gadag	Shirol	Virupaxagouda Barangouda Doddagoudra	100000	90000	10000
18	Gadag	Gadag	Shirol	Basavaraj Shamaraj Madolli	228000	204000	24000
19	Gadag	Gadag	Shirol	Siddaramayya Somashekarayya Nagavi	196800	100800	96000
20	Gadag	Gadag	Shirol	Ningayya Mahadevayya Dandin	225000	200000	25000
21	Gadag	Gadag	Shirol	Shantveerayya Veerabhadrayya	70800	63600	7200
22	Gadag	Gadag	Shirol	Nilamma Virupakshagouda Patil	218400	156000	62400
23	Gadag	Gadag	Shirol	Veeranagouda Mahantagouda Doddagoudra	60000	50000	10000
24	Gadag	Gadag	Shirol	Laxman Ramappa Talawar	600000	400000	100000
25	Gadag	Gadag	Shirol	Iranna Basavaraj Oli	120000	110400	9600
26	Gadag	Gadag	Shirol	Satrappa Yallappa Venkatapur	50000	55000	5000
27	Gadag	Gadag	Shirol	Shivayya Mallayya Dandin	80000	70000	10000
28	Gadag	Gadag	Shirol	Rudragouda Dyavanagouda Doddagoudra	40000	45000	5000
29	Gadag	Gadag	Shirol	Siddalingayya Mallayya dandin	85000	50000	35000
30	Gadag	Gadag	Shirol	Prabhugouda Siddanagouda Sanagouda	40000	35000	5000
31	Gadag	Gadag	Shirol	Basayya Veerbhadrayya Dandin	150000	100000	50000

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
32	Gadag	Gadag	Shirol	Shambayya Mallayya Pujar	130000	100000	30000
33	Gadag	Gadag	Shirol	Mahantesh Chandragouda Doddagoudra	52800	49200	3600
34	Gadag	Gadag	Shirol	Basanagouda Gurungouda Patil	300000	250000	50000
35	Gadag	Gadag	Shirol	Shanmukayya Kotrayya Dandin	62400	31200	31200
36	Gadag	Gadag	Shirol	Chanbasappa Mallayya Dandin	63600	48000	15600
37	Gadag	Gadag	Shirol	Basayya Veerayya Dandin	180000	140000	40000
38	Gadag	Gadag	Shirol	Neelakantagouda Parakkagouda Doddagoudra	95000	80000	15000
39	Gadag	Gadag	Shirol	Channabasayya Kotrayya Dandin	300000	250000	50000
40	Gadag	Gadag	Shirol	Mallikarjunayya Shivayya Hiremath	600000	450000	150000
41	Gadag	Gadag	Shirol	Nilakantayya Gurayya Dandin	96000	62400	33600
42	Gadag	Gadag	Shirol	Siddayya Veerayya Dandin	102000	90600	11400
43	Gadag	Gadag	Shirol	Veerupaxayya Veerayya Dandin	212400	138000	74400
44	Gadag	Gadag	Shirol	Basanagouda Govindagouda Patil	90000	80000	10000
45	Gadag	Gadag	Shirol	Veeranagoud Shantagoud	45600	34800	10800
46	Gadag	Gadag	Shirol	Channanagouda Shantagoud	61200	33600	27600
47	Gadag	Gadag	Shirol	Gangamma Sidramayya Hiremath	198000	81600	116400

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
48	Gadag	Gadag	Shirol	Shankarayya Mallayya Majiguda	144000	137400	6600
49	Gadag	Gadag	Shirol	Hanamantappa Yallappa Olekar	120000	96000	24000
50	Gadag	Gadag	Shirol	Channabasanagoud Mahadegoud Sannagouda	550000	450000	50000
51	Shirahatti	Shirahatti	Chikkasavanur	Mallanagouda Kotragouda Patil	558000	282000	276000
52	Shirahatti	Shirahatti	Chikkasavanur	Mallappa Mahadevappa Goodachihalla	147600	84000	63600
53	Shirahatti	Shirahatti	Chikkasavanur	Mallappa Nagappa Nagappa	150000	130000	20000
54	Shirahatti	Shirahatti	Chikkasavanur	Smt.Geeta Yanakappa Hebbal	90000	70000	20000
55	Shirahatti	Shirahatti	Chikkasavanur	Mouneshwar Mahadevappa Gudavara	200000	150000	50000
56	Shirahatti	Shirahatti	Chikkasavanur	Fakki Reddy Govindappa Tevari	450000	350000	50000
57	Shirahatti	Shirahatti	Chikkasavanur	Fakirgouda Nenganagouda Patil	97200	57600	39600
58	Shirahatti	Shirahatti	Chikkasavanur	Channabasangouda Fakeeragouda Patil	300000	250000	50000
59	Shirahatti	Shirahatti	Chikkasavanur	Yallappa Shivappa Achchalli	200000	150000	50000
60	Shirahatti	Shirahatti	Chikkasavanur	Narasappa Nagappa Gokavi	175200	129600	45600
61	Shirahatti	Shirahatti	Chikkasavanur	Tirakappa Nagappa Gokavi	176400	117000	59400
62	Shirahatti	Shirahatti	Chikkasavanur	Narasappa Devappa Kuri	115800	71100	44700
63	Shirahatti	Shirahatti	Chikkasavanur	Narasappa Ramanna Bellatti	300000	230000	70000

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
64	Shirahatti	Shirahatti	Chikkasavanur	Mahadevappa Basappa Kanakuri	234000	200000	34000
65	Shirahatti	Shirahatti	Chikkasavanur	Chennappa Basappa Goachihal	96000	72000	24000
66	Shirahatti	Shirahatti	Chikkasavanur	Basappa Dudanigappa Gudadavar	100000	80000	20000
67	Shirahatti	Shirahatti	Chikkasavanur	Hanumappa Sivappa Pujar	156000	112800	43200
68	Shirahatti	Shirahatti	Chikkasavanur	Govindaraddi Narasappa Shagoti	500000	350000	150000
69	Shirahatti	Shirahatti	Chikkasavanur	Andanagouda Shankaragouda Patil	200000	150000	50000
70	Shirahatti	Shirahatti	Chikkasavanur	Hemaraddi Narasappa Bairapur	160000	140000	20000
71	Shirahatti	Shirahatti	Chikkasavanur	Rajashekhar Narasappa Bairapur	350000	300000	50000
72	Shirahatti	Shirahatti	Chikkasavanur	Kotragouda Basanagouda Patil	156000	148800	7200
73	Shirahatti	Shirahatti	Chikkasavanur	Ramanna Shivappa Achalli	70000	60000	10000
74	Shirahatti	Shirahatti	Chikkasavanur	Smt. Narasamma Sannanarasanagouda Patil	300000	250000	50000
75	Shirahatti	Shirahatti	Chikkasavanur	Mahantesh Chandrappa Gudadavar	72000	60000	12000
76	Shirahatti	Shirahatti	Chikkasavanur	Ningappa Govindappa Gudadavar	120000	96000	24000
77	Shirahatti	Shirahatti	Chikkasavanur	Guddanagouda Channabasanagouda Patil	124800	57600	67200
78	Shirahatti	Shirahatti	Chikkasavanur	Shankaragouda Narasanagouda Patil	60000	55000	5000
79	Shirahatti	Shirahatti	Chikkasavanur	Somanagouda Shivappa Yalavatti	450000	400000	50000

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
80	Shirahatti	Shirahatti	Chikkasavanur	Neelanagouda Basanagouda Patil	140000	120000	30000
81	Shirahatti	Shirahatti	Chikkasavanur	Ramesh Govindappa Shagoti	500000	400000	100000
82	Shirahatti	Shirahatti	Chikkasavanur	Vishwanathraddi Mallappa Gokavi	400000	300000	100000
83	Shirahatti	Shirahatti	Chikkasavanur	Narasanagouda Basanagouda Yellagoudru	138000	105600	32400
84	Shirahatti	Shirahatti	Chikkasavanur	Shekappa Narasappa Shagoti	900000	700000	200000
85	Shirahatti	Shirahatti	Chikkasavanur	Somaraddi Mallappa Gokavi	800000	600000	200000
86	Shirahatti	Shirahatti	Chikkasavanur	Narasappa Narasappagouda Shagoti	160800	120000	30800
89	Shirahatti	Shirahatti	Chikkasavanur	Santosh Ramanna Godachihal	84000	36000	48000
90	Shirahatti	Shirahatti	Chikkasavanur	Fakiragouda Narasimhagouda	72000	60000	12000
91	Shirahatti	Shirahatti	Chikkasavanur	Ramesh Bhimanna	144000	100000	44000
92	Shirahatti	Shirahatti	Chikkasavanur	Narasappa Fakkirappa Tevari	180000	150000	30000
93	Shirahatti	Shirahatti	Chikkasavanur	Tirakappa Gulappa Gokavi	195600	150000	35600
94	Shirahatti	Shirahatti	Chikkasavanur	Ramesh Virupaxappa Shagoti	92400	57600	34800
95	Shirahatti	Shirahatti	Chikkasavanur	Suresh Irappa Navi	90000	80000	10000
96	Shirahatti	Shirahatti	Chikkasavanur	Chanbasavagouda Basavanagouda Patil	150000	120000	30000
97	Shirahatti	Shirahatti	Chikkasavanur	Narsappa Fakirappa Shagoti	130000	110000	20000

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
98	Shirahatti	Shirahatti	Chikkasavanur	Mallappa Irappa Navi	82800	75000	7800
99	Shirahatti	Shirahatti	Chikkasavanur	Govindappa Pandappa Giradannavar	130000	110000	20000
100	Shirahatti	Shirahatti	Chikkasavanur	Boomaraddi Nagappa Gokavi	130000	100000	30000

2.9 Priority thrust areas

S. No	Thrust area
1	Soil fertility management through production and application of bio-manures
2	Promotion of intercropping systems in Maize and Bt.Cotton crops
5	Promotion of JAKI-9218 & BGD-111-01 varieties of Bengalgram
6	Promotion of SPV-2217 variety of Rabi Sorghum & DHFt-109-3 variety of foxtail millet
8	Assessment of Bheema Super variety of Onion
9	Promotion of ICM practices in White Onion
10	Crop diversification through promotion of Cashew & Ashwagandha
11	Promotion of nutri-farms
12	Popularisation of drudgery reduction equipments
13	Primary processing in millets
14	Livestock nutrition for higher milk productivity

PART III - TECHNICAL ACHIEVEMENTS**3.A. Details of target and achievements of mandatory activities**

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	5	19	19	18	18	432	432

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
200	231	5000	6730	1100	1183	20000	36708

Seed Production (Q)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
75.00	83.93	50000	66220

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
100	150	500	740

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 livestock (No.)	Supply of bio products	
													No.	Kg
1	Varietal demonstration	Millet	Low productivity of local crops	-	Millet Cafeteria	3	2	1	15	0.5	0	0	0	0
2	Intercropping system	Maize+ Redgram	Low income due to sole crop	-	Maize+ Redgram intercropping system	2	0	0	12	0.6 (Redgram)	0	0	• Trichoderma	1
													• Rhizobium	4
3	Thrips Management	Onion	Thrips incidence	Assessment of thrips management practices in Onion crop	-	1	0	0	8	0	0	0	Lecanicillium	1
4	ICM	Greengram	Low productivity of local variety (Shining moong)	-	Demonstration of DGGV-2 variety	4	0	0	10	4.23	0	0	0	0
5	Varietal assessment	Red Onion	Low income due to cultivation of local variety	Assessment of Red Onion varieties of higher productivity	-	2	0	0	15	8.0	0	0	0	0
6	Varietal assessment	White Onion	Low income due to cultivation of local	Assessment of White Onion varieties of higher	-	2	0	0	12	0.12	0	0	0	0

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 livestock (No.)	Supply of bio products	
													No.	Kg
			variety	productivity										
7	IPDM in Chrysanthemum	Chrysanthemum	<ul style="list-style-type: none"> • Low quality and low yields due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low shelf life) • Low yield due to incidence of bud borer pest and leaf spot diseases 	-	IPDM in Chrysanthemum crop	2	-	-	12	-	-	-	-	-
8	IPDM in Gaillardia	Gaillardia	<ul style="list-style-type: none"> • Low quality and low yields due to imbalanced nutrients (loose flower buds and improper opening of flower buds and low 	-	IPDM in Gaillardia	2	-	-	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 livestock (No.)	Supply of bio products	
													No.	Kg
			shelf life) • Low yield due to incidence of bud borer pest and leaf spot diseases											
9	Climate Resilient crop		• Absence of resilient crops suitable for changing climate in the district	-	Demonstration of climate resilient crop	1	-	-	8	0.40	-	-	-	-
10	Health & Nutrition	Nutri-farm	Nutrition deficiency in women and children	-	FLD on Nutri-farm	6	-	-	24	0.12	64	-	3	12
11	Grain Storage	Grain storage	Loss of grains due to incidence of stored grain pests	-	Super grain bags	2	-	-	4	-	18 bags	-	-	-
12	Nutrition Management in dairy animals	Fodder and Azolla	Low productivity of milk in CB cow due to Non-cultivation of	-	Demonstration of Fodder Cafeteria and Azolla Production	4	4	0	1	• Lucerne : 1 Kg • Hedge Lucerne : 1.0 Kg • Stylo santhes hemata:	• Hybrid Napier-6 slips : 4366 Nos. • Perennial sorghum seeds of COF531	0	0	0

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 livestock (No.)	Supply of bio products	
													No.	Kg
			perennial fodder and grass species							0.6 Kg • Azolla culture: 10 Kg	variety: 2.0 Kg • Grazing guinea grass slips: 8720 • Rhodes grass slips : 14520 • Signal grass : 14520			
13	Nutrition Management in dairy animals	Silage production	Low productivity of milk in CB Cow due to Non availability of green fodder throughout the year	-	Demonstration of silage production	4	4	0	1	0	0	0	0	0
14	Nutrition Management in dairy animals	Feeding of Area Specific Mineral Mixture			Demonstration of Feeding Area Specific Mineral Mixture to enhance milk yield	2	0	0	8	0	0	0	0	0
15	Nutrition Management in dairy	Hydroponic Fodder Production	Low productivity of milk in CB Cow	-	Introduction of Hydroponic Fodder	2	2	0	1	0	0	0	0	0

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 livestock (No.)	Supply of bio products		
													No.	Kg	
	animals		due to Non availability of green fodder throughout the year		Production										
16	ICM	Rabi Sorghum	Low productivity of local M-35-1 variety	-	ICM in Rabi Sorghum	2	0	1	10	0.6 (Greengram)	0	0	0	5	
17	Intercropping	Bt. Cotton + Greengram	Low productivity in monocropping	-	Intercropping with Greengram crop in Bt. Cotton	6	0	1	14	0.60	0	0	0	5	
18	ICM	Bengalgram	Low productivity of local variety	-	ICM in JAKI-9218 variety	5	0	1	13	2	0	0	0	10	
19	Varietal assessment	Bengalgram	Low productivity in JG-11 variety	Assessment of BGD-111-1 and DBGV-204 varieties for higher productivity	-	4	0	1	17	1.20	0	0	0	4	
20	IPM	Bengalgram	Incidence of wilt and pod borer	Assessment of wilt management practices	-	2	0	1	22	0	0	0	0	25	
21	Vegetable crop cafeteria	Ridge gourd, Dolichos	Low productivity and low	-	Demonstration on vegetable	4	0	0	18	0.49	0	0	0	0	

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 livestock (No.)	Supply of bio products		
													No.	Kg	
		bean, Coriander, French bean & Okra	income due to non-availability of improved vegetable varieties		crop cafeteria										
22	Dryland horticulture	Cashewnut	Low profit from existing cropping pattern due to vagaries of monsoon and lack of crop diversification	-	Demonstration of agri-horticulture system	3	0	0	15	0	310	0	0	0	
23	Organic farming	Mulberry	Non-practices of organic farming in Mulberry cultivation	-	Demonstration of organic practices in Mulberry crop	1	0	0	25	0	0	0	0	20	

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	Millet Cafeteria	UAS, Dharwad	Millet	0	5	6	15

S. No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Extension activities)
2	Maize+Redgram intercropping system	UAS, Dharwad	Maize+Redgram	0	20	2	10
3	Thrips management	UHS, Bagalkot / ICAR-DOGR, Pune	Onion	5	0	4	8
4	Varietal assessment	ICAR-DOGR, Pune	Red Onion	3	0	2	15
5	IPDM in Chrysanthemum	ICAR-IIHR, Bengaluru	Chrysanthemum	0	5	2	12
6	IPDM in Gaillardia	ICAR-IIHR, Bengaluru	Gaillardia	0	5	2	10
7	Climate Resilient crop	CSIR-CIMAP, Lucknow	Ashwagandha	0	10	1	8
8	Super grain bags	EVOH-Save grain bags, Save grains advanced solutions private limited	Grain storage	0	18	2	4
9	Nutri-farm	UAS, Bengaluru	Nutrition Garden	0	5	14	24
10	Demonstration of Fodder Cafeteria and Azolla Production	ICAR-IGFRI, RRS, Dharwad & UAS, Dharwad	CB Cows	0	10	4	6
11	Demonstration of silage production	NIANP, Bengaluru	CB Cows	0	5	6	4
12	Introduction of Hydroponic Fodder Production	UAS, Bengaluru	CB Cows	0	10	3	5
13	Demonstration of SPV-2217 variety in Rabi Sorghum	UAS, Dharwad	Rabi Sorghum	0	20	3	10
14	Demonstration of Bt. Cotton + Greengram intercropping system	UAS, Dharwad	Bt. Cotton and Greengram	0	20	7	14
15	Demonstration of JAKI-9218 variety in Bengalgram crop	UAS, Dharwad	Bengalgram	0	10	6	13
16	Demonstration of Vegetable crop cafeteria	UHS, Bagalkot	Ridgegourd, Dolichos bean, Coriander, French bean and Okra	0	5	4	18
17	Demonstration of Agri-Horticulture system	UHS, Bagalkot	Cashewnut	0	5	3	15
18	Demonstration of organic practices in Mulberry crop	UAS, Dharwad	Mulberry	0	5	1	25
19	Assessment of White Onion varieties for higher productivity	ICAR-DOGR, Pune	White Onion	3	0	2	12
20	Assessment of Bengalgram varieties for higher productivity	UAS, Dharwad	Bengalgram	3	0	5	17

S. No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Extension activities)
21	Assessment of wilt management practices in Bengalgram crop	UAS, Dharwad	Bengalgram	6	0	3	22
22	Demonstration of DGGV-2 variety in Greengram crop	UAS, Dharwad	Greengram	0	20	4	10
23	Demonstration of feeding Area Specific Mineral Mixture to enhance milk yield	NIANP, Bengaluru	Milch animals	0	10	4	15

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
1	0	0	0	0	5	0	0	0	100	70	8	2	120	50	15	6
2	0	0	0	0	6	0	14	0	17	0	46	0	80	23	12	10
3	5	0	0	0	0	0	0	0	28	2	4	2	56	40	5	3
4	3	0	0	0	0	0	0	0	39	2	11	0	76	30	43	5
5	0	0	0	0	4	1	0	0	36	9	3	0	68	12	34	3
6	0	0	0	0	5	0	0	0	31	4	3	0	53	10	25	0
7	0	0	0	0	10	0	0	0	19	0	3	0	80	0	38	0
8	0	0	0	0	0	18	0	0	4	31	0	0	0	35	0	10
9	0	0	0	0	0	6	0	0	23	94	0	7	55	132	16	25
10	0	0	0	0	0	0	0	0	10	6	2	2	6	4	8	6
11	0	0	0	0	0	0	0	0	75	193	16	27	35	56	15	22
12	0	0	0	0	4	1	0	0	41	0	9	0	26	2	2	0
13	0	0	0	0	15	2	3	0	80	20	15	5	86	6	15	12
14	0	0	0	0	18	2	0	0	65	12	8	2	54	5	12	10
15	0	0	0	0	10	0	0	0	110	50	12	8	82	15	16	12
16	0	0	0	0	5	0	0	0	80	19	6	5	56	18	22	10
17	0	0	0	0	5	0	0	0	60	10	12	8	65	16	14	8
18	0	0	0	0	4	1	0	0	16	14	0	0	36	14	6	4
19	3	0	0	0	0	0	0	0	40	12	2	0	54	18	10	6
20	3	0	0	0	0	0	0	0	53	17	12	8	62	12	8	2
21	6	0	0	0	0	0	0	0	64	12	10	4	58	23	9	3

				Crops					crops	Crops	
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 enterprises : 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 enterprises : 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						
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4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation	Bengalgram	Assessment of potential productivity of NBEG-3 & BGD-111-01 varieties under irrigated condition	5	5	1.2 ha / trial (Total : 6 ha)
	Onion	Assessment of Red Onion varieties for higher productivity	3	3	1.2 ha / trial (Total : 3.6 ha)
	Onion	Assessment of White Onion varieties for higher productivity	3	3	1.2 ha / trial (Total : 3.6 ha)
Integrated Pest Management	Onion	Assessment of thrips management practices in Onion crop	5	5	1.2 ha / trial (Total : 6 ha)
	Bengalgram	Assessment of wilt management practices in Bengalgram crop	6	6	1 ha / trial (Total : 5 ha)
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			22	22	

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

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
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				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
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				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

4.C1. Results of Technologies Assessed

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 pods/plant)	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
Bengalgram	Protective irrigation	Decrease in the productivity of JG-11 variety	Assessment of BGD- 111-01 & DBGV-204 varieties for higher productivity	3	T.O.1 (Farmers' practice) Cultivation of JG-11 variety	-	9.93	Qtl/ha	37.0	16480	1.66	-
					T.O.2 Cultivation of JAKI-9218 variety	UAS, Dharwad	10.71	Qtl/ha	39.6	19225	1.76	-
					T.O.3 Assessment of BGD-111- 01 variety	IARI-RRC, Dharwad	12.50	Qtl/ha	47.6	25543	1.98	-
					T.O.4 Assessment of DBGV-204 variety	UAS, Dharwad	11.37	Qtl/ha	47.3	21477	1.84	

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed** : Assessment of BGD-111-01 & DBGV-204 variety for higher productivity

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

Technology Assessed	Performance indicators				
	Grain Yield (Qtl/ha)	Net Returns (Rs./ha)	B.C. Ratio	% increase in yield	No. of pods/plant
Farmer's practice: Cultivation of JG-11 variety	9.93	16480	1.66	-	37.0
Recommended practice: Cultivation of JAKI-9218 variety	10.71	19225	1.76	13.56	39.6
Alternate practice-1: Assessment of BGD-111-01 variety	12.50	25543	1.98	38.27	47.6
Alternate practice-1: Assessment of DBGV-204 variety	11.37	21477	1.84	28.03	47.3

3. **Specific Feedback from farmers:** Yield performance of BGD-111-01 variety is higher than JAKI-9218 variety

4. **Specific Feedback from Extension personnel and other stakeholders:** Make BGD-111-01 variety seeds available to the farmers through KVK & OFT farmers in higher quantity

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

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 wilt plants/Sq.mt)	Net Return Rs. / Ha	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
Bengalgram	Rainfed		Assessment of wilt management practices in Bengalgram crop	5	T.O.1 (Farmers' practice) Seed treatment with Captan 2.5 gm		12.08	Qtl/ha	0.88	22966	1.87	-
					T.O.2 Seed treatment with Trichoderma 10 gm/Kg of seeds	UAS, Dharwad	13.48	Qtl/ha	0.40	28007	2.03	-
					T.O.3 Seed treatment with Trichoderma @ 10 gm/Kg + Soil treatment with Trichoderma @ 2 Kg mixed with Neem cake @ 50 Kg and FYM @ 100 Kg	UAS, Dharwad	15.74	Qtl/ha	0.19	34635	2.16	

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed** : Assessment of wilt management practices in Bengalgram crop

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

Technology Assessed	Performance indicators				
	Grain Yield (Qtl/ha)	Net Returns (Rs./ha)	B.C. Ratio	% increase in yield	Plant population / Sq. mt.
Farmer's practice: Seed treatment with Captan 2.5 gm	12.08	22966	1.87	-	23.00
Recommended practice: Seed treatment with Trichoderma 10 gm/Kg of seeds	13.48	28007	2.03	11.59	24.92
Alternate practice-1: Seed treatment with Trichoderma @ 10 gm/Kg + Soil treatment with Trichoderma @ 2 Kg mixed with Neem cake @ 50 Kg and FYM @ 100 Kg	15.74	34635	2.16	30.30	26.32

3. **Specific Feedback from farmers:** Seed treatment with Trichoderma and soil treatment with Trichoderma, Neem and FYM gives more yield compared to recommended practice and farmers' practice.

4. **Specific Feedback from Extension personnel and other stakeholders:** Soil and seed treatment with Trichoderma, Neem cake and FYM increase plant population by 14.43% as compared to farmers' practice.

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

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 (Bulb weight in gms)	* Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
Onion	Rainfed	Low yield in local varieties	Assessment of Red Onion varieties for higher productivity	3	T.O.1 (Farmer practice) Cultivation of Bellary / Nasik Red Onion variety	-	41.25	Qtl/ha	98.08	34820	1.73	-
					T.O.2 Cultivation of Arka Kalyan variety	ICAR-IIHR, Bengaluru	50.87	Qtl/ha	110.50	49817	1.96	-
					T.O.3 Assessment of Bheema Super variety	ICAR-DOGR, Pune	53.27	Qtl/ha	117.38	54187	2.03	-

* Net returns are very low due to crash in Onion prices during the harvesting period. But later, prices went up to Rs. 10000 – 15000 per quintal

1. **Title of Technology Assessed** : Assessment of Red Onion 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
Farmer's practice: Cultivation of Bellary / Nasik Red Onion variety	41.25	34820	1.73	-
Recommended practice: Cultivation of Arka Kalyan variety	50.87	49817	1.96	23.32
Alternate practice: Assessment of Bheema Super variety	53.27	54187	2.03	29.13

3. **Specific Feedback from farmers** : Farmers accepted Bheema Super variety for its good bulb yield
4. **Specific Feedback from Extension personnel and other stakeholders** : -
5. **Feedback to Research System based on results and feedback received** : -

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 thrips/plant)	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
Onion	Irrigated	Low yield and income due to cultivation of local variety	Assessment of thrips management practices in Onion crop	5	T.O.1 (Farmer practice) Spray of Lambda Cyhalothrin @ 2 ml/L	-	40.80	Qtl/ha	1.76 thrips/plant	37262	1.84	-
					T.O.2 Spray of Lecanillium lecanii @ 2 gm/L	UHS, Bagalkot	46.00	Qtl/ha	0.96 thrips/plant	45750	1.99	-
					T.O.3 Spray of Lecanillium lecanii @ 2 gm/L + Soluble Boron @ 1 gm/L	ICAR-DOGR, Pune	58.20	Qtl/ha	0.56 thrips/plant	69027	2.46	-

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed** : Assessment of thrips management practices in Onion crop
2. **Performance of the Technology on specific indicators** :

Technology Assessed	Performance indicators			
	Bulb yield (Qtl/ha)	Net Returns (Rs./ha)	B.C. Ratio	(% of purple blotch)
Farmers' practice: Spray of Lambda Cyhalothrin @ 2 ml/L	40.80	37262	1.84	17.80
Recommended practice: Spray of Lecanillium lecanii @ 2 gm/L	46.00	45750	1.99	7.20
Alternate practice-1: Spray of Lecanillium lecanii @ 2 gm/L + Soluble Boron @ 1 gm/L	58.00	69027	2.46	4.00

2. **Specific Feedback from farmers** : Foliar spray of Lecanillium lecanii and Soluble Boron reduced the incidence of thrips and purple blotch disease and in-turn increased the yield to 42% compared to Farmers' Practice (T.O.-1)
4. **Specific Feedback from Extension personnel and other stakeholders** : Lecanillium lecanii and Soluble Boron treated plot gave more yield as compared to either Lambda Cyhalothrin or Lecanillium lecanii only.
5. **Feedback to Research System based on results and feedback received** : --

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 (Bulb weight)	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
Onion	Rainfed	Low yield, keeping quality and income due to cultivation of local variety	Assessment of white Onion varieties for higher productivity	3	T.O.1 (Farmer practice) Cultivation of Telagi White	-	59.53	Qtl/ha	100.60	54367	2.56	-
					T.O.2 Assessment of Bheema Shubra	ICAR-DOGR, Pune	73.67	Qtl/ha	110.8	73333	2.97	-
					T.O.3 Assessment of Bheema Shweta	ICAR-DOGR, Pune	71.33	Qtl/ha	108.16	70500	2.93	-

4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. **Title of Technology Assessed** : Assessment of white Onion varieties for higher productivity
2. **Performance of the Technology on specific indicators** :

Technology Assessed	Performance indicators		
	Bulb yield (Qtl/ha)	Net Returns (Rs./ha)	B.C. Ratio
Farmers' practice: Cultivation of Telagi White	59.53	54367	2.56
Recommended practice: Assessment of Bheema Shubra	73.67	73333	2.97
Alternate practice-1: Assessment of Bheema Shweta	71.33	70500	2.93

1. **Specific Feedback from farmers** : Bheema Shubra variety has got uniform bulb size, bright white colour and good marketability. Therefore farmers accepted Bheema Shubra variety
2. **Specific Feedback from Extension personnel and other stakeholders** : --
3. **Feedback to Research System based on results and feedback received** : --

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	Net Return Rs. / unit	BC Ratio	Remarks if any
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.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

PART V - FRONTLINE DEMONSTRATIONS (2019-20)

1. 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
	Oilseeds													
1	Pulses	Rainfed	Kharif, 2019	Greengram	DGGV-2		Integrated Crop Management	Integrated Crop Management in Greengram crop	8	8	0	0	9	11
2	Pulses	Rainfed	Rabi	Bengalgram	JAKI-9218	-	ICM	Demonstration of JAKI-9218 variety	4	4	1	9	3	7
3	Cereals	Rainfed	Rabi	Rabi Sorghum	SPV-2217	-	Varietal demonstration	Demonstration of SPV-2217	8	8	3	17	5	15
4	Maize+ Redgram	Rainfed	Khairf, 2019	Maize+ Redgram	TS-3R	Kaveri Champ	Intercropping system	Demonstration of	8	8	14	6	13	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
						555		Maize+Redgram intercropping system						
5	Millets	Rainfed	Kharif	Proso millet	DHPM-2769	-	Varietal demonstration	Demonstration of millets	2	2	0	5	0	5
				Foxtail millet	DHFt 109-3									
				Little millet	DHLM-36-3									
6	Vegetables	Irrigated	Rabi	Ridgegourd	Arka Prasanna	-	Varietal demonstration	ICM in vegetable crop cafeteria	3	3	0	5	5	0
				Dolichos bean	Arka Amogh									
				French bean	Arka Sharat									
				Okra	Arka Anamika									
				Coriander	Arka Isha									
	Flowers													
7	Chrysanthemum	Irrigated	Kharif, 2019	Chrysanthemum	Kurnool	-	IPDM	IPDM in Chrysanthemum	2	2	-	5	5	-
8	Gaillardia	Irrigated	Kharif, 2019	Gaillardia	Galate	-	IPDM	IPDM in Gaillardia	2	2	-	5	5	-
	Ornamental													
9	Fruit	Rainfed	Kharif, 2019	Cashewnut crop	Vengurla -4	-	Dryland horticulture	Demonstration of Agri-horticulture system	2	2	0	5	0	5
	Spices and condiments													
	Commercial													
10	Bt. Cotton	Rainfed	Kharif, 2019	Bt.Cotton+Greengram	Kanaka	-	Intercropping	Intercropping of Bt. Cotton + Greengram (1:2)	8	8	-	20	12	8
11	Medicinal and aromatic	Rainfed	Late Kharif	Ashwagnadha	Poshita	-	Climate resilient crop	Demonstration of climate	4	4	-	10	6	4

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
								resilient crop						
12	Fodder	Irrigated	Kharif	Perennial fodder crops	<ul style="list-style-type: none"> • Hybrid Napier – DHN6 • Guinea Grass • Rhodes Grass • Signal Grass • Lucerne • Azolla Culture 	-	Nutrition Management in dairy animals	Demonstration on Fodder crops and Azolla Production & feeding to milch animals for enhanced milk productivity	10	5	-	5	5	-
	Plantation													
	Fibre													
13	Dairy	Dryland/ Irrigated	Rabi	CB Cow	-	-	Nutrition Management in dairy animals	Demonstration of silage production & feeding to milch animals for enhanced milk productivity	10	10	-	10	10	-
14	Dairy	Dryland/ Landless	Rabi	CB Cow	-	-	Nutrition Management in dairy animals	Introduction of Hydroponic Fodder Production & feeding to milch animals for enhanced milk productivity	10	3	-	3	3	-
15	Dairy	Irrigated/ Dryland	Rabi	CB Cow	-	-	Nutrition Management in dairy animals	Feeding of Area Specific Mineral Mixture to enhance milk	10	10	2	8	10	-

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
	Others (specify)													
17	Nutri farm	Irrigated & Rainfed	All seasons	Vegetables	-	-	Nutrition	Demonstration of Nutri farm	-	-	0	6	6	0
18	Post harvest	-	-	Greengram	-	-	Grain storage	Demonstration of super grain bags	-	-	0	20	20	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	
	Oilseeds												
1	Pulses	Rainfed	Kharif, 2019	Greengram	DGGV-2	-	Integrated Crop Management	Integrated Crop Management in DGGV-2 variety	Kharif, 2019	L	L	H	Rabi Sorghum & Bengalgram
2		Rainfed	Rabi 2019-20	Bengalgram	JAKI-9218	-	ICM	Demonstration of JAKI-9218 variety	Rabi 2019-20	L	M	H	Maize & fallow land
	Cereals												
4	Cereals	Rainfed	Rabi 2019-20	Rabi Sorghum	SPV-2217	-	ICM	Demonstration of SPV-2217 variety	Rabi 2019-20	L	L	H	Greengram & fallow land
5	Maize+ Redgram	Rainfed	Kharif, 2019	Maize+ Redgram	TS-3R	Kaveri Champ 555	Rainfed	Demonstration of Maize+Redgram intercropping system	Kharif 2019-20	L	L	M	Greengram
6	Millets	Rainfed	Kharif 2019	Proso millet	DHPM-2769	-	Varietal demonstration	Demonstration of millets	Kharif 2019	L	L	M	Maize & Bt. Cotton
Foxtail millet				DHFt 109-3									
Little millet				DHLM-36-3									
7	Vegetables	Rainfed	Rabi 2019	Ridgegourd	Arka Prasanna	-	Varietal demonstration	ICM in vegetable crop cafeteria	Rabi 2019	L	L	M	Onion

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	
15	Sericulture	Irrigated	All season	Mulberry	V-1	-	Organic Practices in Mulberry crop	Cultivation of Mulberry through organic manure	All season	L	M	L	-

5.B. Results of FLDs

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)					% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check	Gross Cost		Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
							H	L	A											
Oilseeds																				
Pulses																				
Greengram	ICM in Greengram	DGGV-2	-	Rainfed	20	8	7.88	5.90	6.95	5.97	17.28	25125	38206	13081	1.52	23642	32821	9179	1.39	
Bengalgram	Demonstration of JAKI-9218 variety	JAKI-9218	-	Rainfed	10	4	16.25	11.00	14.03	10.98	27.77	30969	57535	26567	1.87	28338	44988	16660	1.61	
Cereals																				
Rabi Sorghum	Demonstration of SPV-2217 variety	SPV-2217	-	Rainfed	20	8	17.50	7.5	9.65	8.42	14.61	20591	37914	17323	1.84	19089	30939	11850	1.62	
Maize+ Redgram	Maize+ Redgram	TS-3R	Kaveri Champ 555	Rainfed	20	8	CEY: 40.12 (Maize: 21.87 + Redgram: 7.30)	CEY: 31.49 (Maize: 18.37 + Redgram: 5.25)	CEY : 35.68 (Maize: 20.15 + Redgram: 6.17)	24.25	33.81	37021	64239	27218	1.73	29113	43719	14606	1.50	
Millets																				
Foxtail Millet	Demonstration millet cafeteria	Proso millet	DHP M-2769	-	Rainfed	5	2	15	8.5	11.5	-	-	20428	35650	15223	1.73	-	-	-	-

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)			% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)				
							Demo				Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Fibre crops like cotton	Demonstration of Bt.Cotton+ Greengram intercropping system	DGGV-2 (Greengram)	Kanaka (Bt. Cotton)	Rainfed	20	8	CEY: 28.17 (Bt.Cotton:18.05 + Green gram: 8.10)	CEY: 17.25 (Bt.Cotton:12.00 + Green gram: 4.20)	CEY: 22.04 (Bt.Cotton:14.44 + Green gram: 6.08)	16.24	35.71	43965	114608	70643	2.60	40635	84469	43834	2.08
Medicinal and aromatic																			
*Ashwagandha	Climate resilient crop	Poshita	-	Rainfed	10	4	3.25	2.50	2.85	New crop		18725	42750	24025	2.28	New Crop			
Fodder																			
Plantation																			
Fibre																			
Others (pl.specify)																			
Sericulture	Sericulture	V-1 (Mulberry)	-	Irrigated	5	2	56.00	42.30	48.60	40.80	19.11	55693	170217	114523	3.05	54883	142683	87800	2.60

** BCR= GROSS RETURN/GROSS COST

H – Highest Yield, L – Lowest Yield A – Average Yield

* Ashwagandha crop demonstration does not have local check as this crop is a new introduction during rabi season. Hence, this is compared with Bengalgram crop as local check to show that Ashwagandha is more profitable compared to traditional rabi season crop i.e Bengalgram

1)Data on additional parameters other than yield : Demonstration of DGGV-2 variety in Greengram crop

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration plot	Local check plot
No. of pod borer / plant	0.29	0.87

Incidence of Powdery Mildew disease	2.80 %	8.50 %
-------------------------------------	--------	--------

2) Data on additional parameters other than yield : Demonstration of JAKI-9218 variety in Bengalgram

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration plot	Local check plot
Wilt incidence (Percentage)	0.10	0.38
No. of pod borers (Nos./Sq. mtr area)	0.16	0.42

3) Data on additional parameters other than yield : 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	10.62	24.65

4) Data on additional parameters other than yield : IPDM in White Onion

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration plot	Local check plot
Bulb weight (gms)	115.16	100.38

5) Data on additional parameters other than yield: IPDM in Chrysanthemum

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration plot	Local check plot
Flower bud borer (No./ Plant)	0.44	1.20
% of leaf spot incidence	8%	21%

6) Data on additional parameters other than yield: IPDM in Gaillardia

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration plot	Local check plot
Flower bud borer (No./ Plant)	0.32	1.16
% of leaf spot incidence	6.4%	18.2%

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (kg/animal)				% Increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy	Demonstration on Fodder Cafeteria and Azolla Production	CB Cows	5	5	12.00	6.00	8.26	6.70	23.28	22690	62445	39755	2.75	34762	50652	15890	1.45
	Demonstration on usage of silage bags for silage production for feeding to milking dairy animals for higher milk productivity	CB Cows	10	10	9.50	6.10	7.56	6.55	15.41	37577	57153	19576	1.52	34452	49518	15066	1.43
	Demonstration on hydroponic fodder production and feeding for higher milk productivity	CB Cows	10	3	9.20	7.50	8.42	7.25	16.13	28620	63693	35073	2.22	33581	54810	21229	1.63

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (kg/animal)				% Increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
	Demonstration on feeding of area specific mineral mixture to enhance milk yield	CB Cows	10	10	11.00	3.50	7.15	6.10	17.21	33461	53983	20522	1.61	33101	46116	13015	1.39
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
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 and Azolla production

Salient features of Perennial Grasses as perceived by Farmers involved in Demonstrations

	Palatability of grass / fodder	Soil erosion controlling character	Regenerating capacity of grass / fodder	Suitability to grow on the farm bunds	Average Bio-mass / 100 sq.ft. at 1 st harvested stage	Average No. of tillers at 1 st harvesting stage	Average height of the grass at 1 st harvesting stage
Hybrid Napier DHN-6	75-85% (Very good)	Yes	Yes	Yes	21 Kg	40.0	4.6 ft.
Guinea grass	90-100% (Excellent)	Yes	Yes	Yes	15 Kg	49.0	1.4 ft.
Rhodes grass	90-100% (Excellent)	Yes	Yes	Yes	1.2 Kg	58.0	3.1 ft.
Signal grass	75-85% (Very good)	Yes	Yes	Yes	3.5 Kg	46.0	2.1 ft.
Lucerne	90-100% (Excellent)	Yes	Yes	Yes	3.8 Kg	5.4	1.6 ft.

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 Cafeteria and Azolla culture

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration	Check
Feeding of Fodder and Azolla culture	<ul style="list-style-type: none"> Gradual improvement in the general condition of the animal health Increase in intake of dry fodder Cows are coming to heat within the period 	-
Salient features of Azolla production	<ul style="list-style-type: none"> Average production of Azolla in 12'x4' area was around 0.25 Kg/day 	-
Nutrition	Proper nutrition	No systematic nutrition

Data on additional parameters : Demonstration of silage production

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration	Check
Supply of fodder	<ul style="list-style-type: none"> Possible for regular supply of silaged green fodder to the animals. Ensuring the silaged green fodder especially during lean period 	-
Weather	Silage can be made under all weather conditions	-

Data on additional parameters : Introduction of Hydroponic Fodder Production

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration	Check

Data on other parameters in relation to technology demonstrated		
Water consumption	Low consumption of water. Ideal for drought areas	-
Fertiliser requirement	No fertiliser required	-
Nutrition	High nutrition and good hydration for animals	-

Data on additional parameters : Demonstration on feeding of Area Specific Mineral Mixture

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demonstration	Check
Supply of Area Specific Mineral Mixture	Improved reproductivity efficiency in female animals	-
	Reduce intercalving period leading to more productive life of animals	-
	Improves milk production	

5.B.3. Fisheries : NIL

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m ²)	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 Cost	Gross Return	Net Return	** BCR	Gross Cost	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.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m ² }	Yield (Qtl/ha)			% Increase	*Economics of demonstration (Rs./unit) or (Rs./m ²)				*Economics of check (Rs./unit) or (Rs./m ²)				
					Demo				Check if any	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
H	L	A															
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl. specify)																	
Grain Storage	Super grain bags	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrition & Health	Demonstration of Nutri-farm	-	6	-	-	-	-	-	18000	45585	27585	1.50	-	-	-	-	

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

Data on additional parameters other than yield : Grain Storage

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Local
Insect load/Kg. of grains (Nos.)	0	14
Weight of grain loss/Kg	0	73.9 gms
Weight of grain loss/25 Kgs	0	1.82 Kgs
Cost of grain loss (Rs.)-Greengram @ Rs.80/Kg.	0	Rs.145/-

Data on additional parameters other than yield : Health & Nutrition

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Local
Amount spent towards purchase of vegetables/year (Rs.225/month)	Rs. 2700/-	Rs.11400/- (Rs.925/month)
Consumption of leafy vegetables in days/week	4-5 days/week	1-2 days/week
Percentage adequacy of vegetables	61.43	-
Availability of vegetables per day/ member	215 gms	

5.B.5. 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	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)				
					Demo	Check			Cost incurred for grading and cleaning				Cost incurred for grading and cleaning				

* 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.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Local

5.B.6. Extension and Training activities under FLD

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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)										
Group Dynamics and farmers organization	2	75	0	75	15	0	15	90	0	90
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems	1	32	20	52	12	7	19	44	27	71
Others (Pl. specify)										
TOTAL	56	939	344	1282	366	130	620	1206	638	1714

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
techniques										
Others (pl.specify)										
Post harvest technology and value addition										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
INM in flower crops	3	49	11	60	3	0	3	52	11	63
Post harvest management in flower crops	1	18	2	20	4	0	4	22	2	24
d) Plantation crops										
Production and Management technology	3	53	2	55	17	2	19	70	4	74
Processing and value addition										
Others (pl.specify)										
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										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	61	1604	0	1604	423	0	423	2027	0	2027
Integrated water management										
Integrated nutrient management	2	0	0	0	46	0	46	46	0	46
Production and use of organic inputs	1	35	0	35	4	0	4	39	0	39

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	1	5	16	21	0	0	0	5	16	21
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	158	3027	531	3558	779	120	899	3806	651	4457

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										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs	1	18	0	18	0	2	2	18	2	20
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying	4	76	4	80	11	11	22	87	15	102
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)										
Women empowerment	1	0	25	25	2	3	5	2	28	30
TOTAL	6	94	29	123	13	16	29	107	45	152

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										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching	1	0	24	24	0	2	2	0	26	26
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)										
Entrepreneurship Development Programme										
TOTAL	1	0	24	24	0	2	2	0	26	26

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	42	5	47	0	0	0	42	5	47
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										
Household food security										
Any other (pl.specify)										
Household nutritional security	3	14	40	54	3	4	7	17	44	61
Total	5	56	45	101	3	4	7	59	49	108

7.F. Training programmes for Extension Personnel 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
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	6	5	124	129	0	30	30	5	154	204
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										
Household food security										
Any other (pl.specify)										
Soil and water testing										
Total	6	5	124	129	0	30	30	5	154	204

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	5	78	37	115	12	1	13	90	38	128
1.b.	Commercial production of vegetables										
2	Production and value addition										
2.a.	Fruit Plants	1	26	0	26	10	0	10	36	0	36
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	Soil health and fertility management	61	1605	0	1605	426	0	426	2031	0	2031
4	Production of Inputs at site	1	14	0	14	5	0	5	19	0	19
5	Methods of protective cultivation										
6	Others (pl.specify)										
	Soil and water conservation	5	56	52	108	15	10	25	71	62	133
7	Post harvest technology and value addition										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
	Storage loss minimization techniques										
8	Farm machinery										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	Livestock and fisheries										
10	Livestock production and management										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c.	Fisheries Nutrition										
10.d.	Fisheries Management										
10.e.	Others (pl.specify)										
	Dairy management	1	1	17	18	4	0	4	5	17	22
11.	Home Science										
11.a.	Household nutritional security	3	23	58	81	8	3	11	31	61	92
11.b.	Economic empowerment of women	4	0	102	102	0	18	18	0	120	120
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	Agricultural Extension										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Integrated farming system	1	32	20	52	12	7	19	44	27	71
	Organic farming	5	100	56	156	13	10	23	113	66	179
	Integrated Pest	2	40	8	48	2	1	3	42	9	51

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	
	Management											
	Total	84	1961	350	2311	502	50	552	2482	400	2863	

Details of sponsoring agencies involved

- i) ASF, Hulkoti
- ii) KSDA
- iii) CADA
- iv) Karnataka State Department of Agriculture
- v) UAS, Dharwad
- vi) GITSERD, Hulkoti
- vii) ATMA

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.c.	Commercial vegetable production												
1.d.	Integrated crop management												
1.e.	Organic farming												
1.f.	Others (pl.specify)												
2	Post harvest technology and value addition												
2.a.	Value addition												
2.b.	Others (pl.specify)												
3.	Livestock and fisheries												
3.a.	Dairy farming	1	19	1	20	0	0	0	19	1	20		
3.b.	Composite fish culture												
3.c.	Sheep and goat rearing												
3.d.	Piggery												
3.e.	Poultry farming												
3.f.	Others (pl.specify)												
4.	Income generation activities												
4.a.	Vermi-composting	1	18	1	19	1	0	1	19	1	20		
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.												
4.c.	Repair and maintenance of farm machinery and implements												
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, dyeing etc.	1	0	24	24	0	2	2	0	26	26		
4.j.	Agril. para-workers, para-vet training												
4.k.	Others (pl.specify)												
	Women empowerment	1	0	25	25	0	5	5	0	30	30		
5	Agricultural Extension												
5.a.	Capacity building and group dynamics												
5.b.	Others (pl.specify)												
	Grand Total	4	37	51	88	1	7	8	38	58	96		

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

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	
1	Vermicompost producer	01-01-2020	26-02-2020	179898	18	0	18	2	0	2	20	0	20	17
2.	Dairy farmer/entrepreneur	01-01-2020	27-02-2020	210743	16	0	16	4	0	4	20	0	20	19

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
Celebration of important days (specify)				0			0			0
International Yoga day	1	36	26	62	0	0	0	10	4	14
Parthenium Awareness week	1	35	0	35	12	0	12	0	0	0
World No tobacco day	1	0	20	20	0	0	0	20	10	30
Vigilance awareness week	1	32	24	56	0	0	0	10	4	14
World food day	1	35	100	135	10	27	37	19	1	20
World soil day	1	132	25	157	20	10	30	10	5	15
Kisan Diwas	1	150	100	250	30	6	36	5	5	10
Any Other (Specify)				0			0			0
Bi-monthly meetings	3	0	0	0	0	0	0	92	14	106
Swachha Bharath Abhiyan	26	1008	350	1358	70	35	105	42	29	71
Total	1178	16520	11407	27927	2876	1404	4280	574	212	786

8.2 Special Extension Programmes

Nature of Extension Programme	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
Jal Shakti Abhiyan	03-09-2019 & 02-10-2019	1229	1323	2677	82	43	125	67	10	77
Fertilizer Use Awareness Campaign	22-10-2019	175	18	211	11	7	18	5	4	9
National Animal Disease Control Programme	11-09-2019	173	72	270	15	10	25	25	10	35
Tree Plantation Campaign	17-09-2019	112	64	190	8	6	14	40	24	64
Any other, Pl. specify										
Total		1689	1477	3348	116	66	182	137	48	185

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS**9.A. Production of seeds by the KVKs**

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Rabi Sorghum	SPV-2217		10.93	46450	201
	Foxtail millet	DHFT-109-3		0.45	3300	25
	Browntop Millet	Local		0.05	700	5
	Little Millet	DHLM-36-3		0.35	2150	15
	Proso Millet	DHPM-2769		0.05	350	5
Oilseeds	Groundnut	DH-256		15.00	105000	25
	Safflower	ISF-764		10.62	106200	41
Pulses	Bengalgram	JAKI-9218		22	220000	110
	Bengalgram	BGD.111-01		0.60	6000	3
	Bengalgram	DBGV-204		0.60	6000	3
	Greengram	DGGV-2		8.10	70200	112
	Redgram	TS-3R		6.96	69600	155
Commercial crops						
Vegetables	Onion	Arka Kalyan		4.13	413000	123
	Onion	Bheema Super		3.44	344000	239
Flower crops						
Spices						
Fodder crop seeds	Lucerne			12.63 Kgs	4780	30
	Perennial Sorghum			2.9 Kgs	1854	7
	Stylo haemata			9.9 Kgs	5432	17
Fiber crops						
Forest Species						
Others (specify)	Ashwagandha			0.40	10000	10
Total				83.93	1415016	1126

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings	Drumstick	Bhagya		206	5430	29
Fruits	Mango	Alphonso		200	20500	29
	Tamarind	PKM-1		150	15000	15
	Jamun	Vengurla-1		150	15000	15
	Guava	Lucknow-49		56	2300	14
	Lime	Kagzi Lime		56	2200	14
	Papaya	Red Lady		56	960	14
	Ornamental plants					
Medicinal and Aromatic						
Plantation	Cashewnut	Vengurla-4		1160	69600	24
Spices	Curryleaf	Suhashini		206	5430	29
Tuber						
Fodder crop saplings	Guinea grass			10827	8120	20
	Congo signal			26368	18462	21
	Hybrid napier grass			5940	6600	11
	Rhodes grass			20104	14075	21

Forest Species	Melia dubia			741	18525	15
Others(specify)						
Total				66220	202202	271

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Vermiwash	105 lit	3090	15
	Vermicompost	130 Qtl	39000	52
	Rhizobium	84 Kgs	8400	168
	PSB	116 Kgs	11600	232
	Azospirillum	45 Kgs	4500	90
Bio-pesticide				
Bio-fungicide	Trichoderma	37 Kgs	7400	148
Bio Agents	Earthworms	190 Kgs	61850	104
Others (specify)	Azolla	33 Kgs	3300	33
Total			139140	842

9.D. Production of livestock

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)	Giriraj Poultry Birds	150	19950	10
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total		150	19950	10

PART X – PUBLICATION, SUCCESS STORY, INNOVATIVE METHODOLOGY, ITK, TECHNOLOGY WEEK**10. A. Literature Developed/Published (with full title, author & reference)**

(A) KVK Newsletter:

Date of start: English News Letters – January, 2003 & Krishi Darpana in Kannada language – October 2015Periodicity: Monthly Copies printed in each issue: 250

(B) Literature developed/published

Item	Number
Research papers- International	0
Research papers- National	0
Technical reports	0
Technical bulletins	4
Popular articles - English	0
Popular articles – Local language	5
Extension literature	9
Others (Pl. specify)	
TOTAL	18

10.B. Details of Electronic Media Produced

Sl. No.	Type of media	Title	Details
1	CD / DVD	Vermicompost	Preparation of vermicompost and its uses
2	Mobile Apps	-	
3	Social media groups with KVK as Admin	WhatsApp – • KVK, HULKOTI, GADAG group • Cashew Growers group • Mango Growers group • GADAG FPO's	
4	Facebook account name	Khp Kvk Hulkoti	
5	Instagram account name	KVKGadag	

10.C. Success Stories / Case studies

I. DOUBLING OF INCOME – A SUCCESS STORY OF BENGALGRAM FARMER

Shri Goudappagouda Fakiragouda Kagadal of Khanapur village is one of the young farmer participated in FLD-Bengalgram programme of KVK during 2017-18. He was very enthusiastic to adopt improved technologies to address productivity constraints in Bengalgram. He used to cultivate Bengalgram variety of JG-11. Incidence of wilt was the major problem that affected the yield to the extent of 40-50 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 wilt tolerant variety (JAKI-9218), seed treatment with trichoderma and bio-fertilizers, foliar spray of 19:19:19 water soluble fertilizer and appropriate technologies for management of pod borer. Local check of JG-11 was also laid out adjacent to the demonstrated plot. Shri Goudappagouda adopted all the suggested technologies related to sowing method, seed rate, nipping, nutrition, intercultivation and management of pod borer. KVK Scientists periodically visited his plot and given him timely suggestions. As a result of this, bumper crop was raised and all the farmers in the village visited the 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	
15.0	11.5	30.43	22320	13300	67.81	3.50

The farmer could get 30.43 per cent increased yield and 67.81 per cent increased net income. His net income was almost doubled. Potential yield of the variety of was achieved. This yield was 3 times the yield of State and District average and two times the yield of National Average.

During the subsequent years of 2018-19 and 2019-20, the technology was spread to entire Khanapur village and surrounding villages of Gangapur and Radder Naganur. The farmer says that, JAKI-9218 variety is wilt tolerant and high yielding and timely management of pod borer has enhanced the productivity. Further, he says that he get Rs.15,000/- additional returns per hectare by spending Rs.3000/- as additional cost per hectare.



II. SUCCESSFUL DAIRY ENTERPRISE OF MBA GRADUATE

Mr. Veeranna Naikar, a Graduate in Master of Business Administration belonging to Machenahalli villages of Shirahatti taluk was settled at Bengaluru doing a job at private firm. He was not happy with the job and always thought of doing his own business. During 2017-18, he visited KVK and explained the possibility of starting dairy farm at his village. He had an ancestral property of 6.00 acres. KVK provided him the consultancy for starting dairy unit and project report. He took a loan of Rs.12.00 lakhs and invested Rs.2.00 lakhs from his pocket. Constructed housing shelter for 10 animals and he purchased 6 HF and 1 Jersey Cow. In the mean time, he attended one week duration training programme at KVK on Scientific Dairy Management. He learnt various aspects of dairy management. He purchased grass slips of hybrid napier, guinea grass, Rhodes grass, stylo heamata and planted in his farm. He also started cultivation of multi-cut sorghum. Apart from this, he established Azolla unit and started silage making. He faced various issues related to feed management and health & hygiene aspects of animals and cattle shed. He was in continuous contact with KVK Animal Scientist and got his issues solved. From 2018 September onwards, Mr. Naikar started getting milk yield of 70 liters/day from his dairy unit. He says that, he incurred expenditure of Rs.20,000/- per month for management of dairy unit. He gets net returns of Rs.40,000/- per month and he remitted Rs.10,000/- as monthly instalment of loan. He says that, net income of Rs.30,000 per month is very good income and is huge savings for him. He says that he could not save any thing when he was in Bengaluru.

Within 2 years of establishment of dairy unit, he could convince the youths in his village that dairy is a profitable enterprise. The principle of management which he has learnt in his degree programme coupled with constant technical guidance of KVK helped him to achieve the success, he says. When asked about further plan, he says that he is planning to develop his own milk brand of his dairy farm and sell it across district.

III. ENHANCING THE LIVELIHOOD THROUGH UPGRADATION OF LOCAL GOAT



The farmers who are practising goat farming in dryland area are facing the problem of low income with local goat due to less sustainability in view of prevailing high temperatures, less body weight gain, low milk yield and long gestation period. So to overcome these problems, Jamunapari buck was introduced through NICRA Project in Mahalingapur village during 2016-17. The purpose of demonstration was to



show enhanced body weight, increased milk yield and capacity to attain early maturity even under increased temperature conditions as this breed of Jamunapari buck is tolerant to high temperatures. Through the project, three Jamunapari bucks were provided to farmers for upgradation of local goats in the month of January, 2017.

Shri Takrappa Kempanna Lamani is one of a goat farmer and managing the small enterprise since many years. It is the only source of income for the family of four members as he does not possess any land. He was rearing a flock of 50 non-descriptive goats. Due to lack of knowledge in management practices of goat, he faced lot of mortality of goats. During 2016, his goat population reduced to three. This has put him in distress as he did not have alternative livelihood option. During this period, he came in contact with KVK as the village was adopted under National Innovation and Climate Resilient Agriculture (NICRA) Project. KVK trained Shri Takrappa on Scientific Management of goat with major focus in balance nutrition, deworming, vaccination and disease management. During 2017, he was given Jamunapari Buck by KVK and during the same time he purchased 7 She goats from the local market. Now, he has a 10 +1 goat unit. During the same year, he got 7 male kids and 5 female kids. Now, the goat population is increased to 16. The unit produced 12 kids including 6 male and 6 female. He sold 6 male kids for the price of Rs.5500/- per kid to other goat farmers in the region and earned an income of Rs.33,000/-. In the subsequent years, his goat unit size increased to 32 (31+1).



During beginning of 2019, Mr.Takrappa sold 10 bucks and earned an income of Rs.60,000/-. He sold it to neighbouring places of Shiggoan, Bankapur, Majjur, Hirevaddatti and Kalasapur. From the income earned, he purchased 20 female kids. During the same year, he sold 13 does (She goat) and earned an income of Rs.1.0 lakh.



Due to KVK's continuous technical support, he is able to achieve this income. He says that, upgraded (Jamunapari) one year old goat has body weight of 50 Kgs as against 30 Kgs in local breed. Further, he says that he is providing upgradation services to other goat units free of cost. Due to this intervention, the upgraded goat population is increasing in Mahalingapur village as well as in the neighbouring villages and neighbouring taluks. Now Mr.Takrappa has a unit size of 29 upgraded kids and 1 Jamunapari Buck. He wants to increase the unit size to 100 by 2020. He owes the credit to NICRA Project for improving his livelihood status.

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

I) FPO OFFICE IN KVK PREMISES STRENGTHENS TOT PROCESS :

KVK has given a space for Office as well as godown for Hulkoti Horticulture Farmers' Producers Company Ltd. to run its activities. During the agricultural season, lot of Member farmers visit the FPO for purchase of agri-inputs and advisories. These farmers interact with KVK Scientists regarding the agricultural problems. Need based solutions are being given to farmers for pest and

disease problems. Prescription based solution is given to the farmers and they purchase the inputs from FPO. This mechanism has strengthened the TOT process of KVK for FPO farmers.

II) FARMER-SCIENTIST INTERACTION :

During Kharif and Rabi seasons, KVK organises Farmer-Scientist interaction programme in collaboration with ATMA, Gadag. Progressive and innovative farmers are invited for the interaction programme. Issues related to availability of quality seeds and other inputs and improved technologies are being discussed in the meeting and solutions are provided to farmers by KVK Scientists and Officers of Department of Agriculture.

III) CONVERGENCE OF HORTICULTURE EXTENSION PROGRAMME :

Crop diversification through promotion of Mango and Cashew is one of the thrust area of KVK. Through awareness programme, trainings & FLD programmes KVK promoted mango and cashew in Gadag district. To scale up the technology, KVK adopted convergence strategies involving other agencies/Departments having similar objective of promotion of fruit crop cultivation. KVK involved State Department of Horticulture, Watershed Development Department, Zilla Panchayat through MGNREG, Directorate of Cashew and Coco Development, Cochin, Reliance Foundation and ATMA. KVK played the role of facilitation, expertise and nodal partner for promotion of Mango and Cashew.

10.E. Give details of indigenous technology 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	Livestock	<ul style="list-style-type: none"> Groundnut oil + Sodium Bicarbonate A paste of Garlic, Ginger & Jaggery 	For treatment of Bloat	Groundnut oil helps in reducing gas produced inside rumen. Sodium bicarbonate neutralized acid produced in rumen. Garlic and Ginger act as ruminoforics.
2	Livestock	Feeding of Alovera Juice	For the treatment of Gastrointestinal parasite in calves, kid & lambs.	Aloevera juice lubricates the intestine to expel endoparasites.
3	Livestock	Animal washing in Canal/river water	For the treatment of foot & mouth disease	It facilitates drying of wound and protection from flies
4	Livestock	Turmeric powder mixed in ghee, heated and applied	For the healing of wound	Turmeric has got anti microbial properties.
5	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.
6	Livestock	Zeera & Garlic are boiled in water and is fed	For the treatment of fever	Act as anti cold & fever.
7	Livestock	<ul style="list-style-type: none"> 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 ecto parasitacidal properties.
8	Livestock	Paste of alovera liquid is applied on udder & teats	For the treatment of mastitis for reducing swelling	Aloevera act as astringent and anti oxidant that reduces swelling.

10 F. Technology Week celebration during 2019-20:

Period of observing Technology Week: **From 22-01-2020 to 28-01-2020**

Total number of farmers visited : **11400**

Total number of agencies involved : **2**

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
Gosthies	1	191	Cashewnut crop
Lectures organized	7	300	Lectures organized on crop technologies
Exhibition	1	8113	Crop, livestock and have science technologies
Film show	2	240	Mango & Cashew
Fair	1	355	Rabi & Summer crop campaign
Farm Visit	3	201	Rabi crops, Livestock, Agricultural Machineries
Diagnostic Practicals	-	-	-
Supply of Literature (No.)	8	2000	Crop technology
Supply of Seed (q)	-	-	-
Supply of Planting materials (No.)	-	-	-
Bio Product supply (Kg)	-	-	-
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week	23	9400	

10 E. Recognition and Awards: Nil

PART XI – SOIL AND WATER TEST

11.1 Activities of Soil and Water Testing Laboratory

- A. Status of establishment of Lab : 2005-06
1. Year of establishment : 01.07.2005
 2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
A) Non-recurring contingency			
1	Spectrophotometer	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
A) 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 so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	8500	17594	323
Water Samples	4710	4496	"
Plant samples	103	103	"
Manure samples	-	-	-
Others (specify)	-	-	-
Total	13313	22193	323

C. Details of samples analyzed during the 2019-20 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	1044	3578	251
Water Samples	565	551	"
Plant samples	27	27	"
Manure samples	-	-	-
Others (specify)	-	-	-
Total	1636	4156	251

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
2. MRIDA PARIKSHAK	31-03-2017	Working

B. Details of soil samples analyzed during 2019-20 and since establishment with Mobile Soil Testing Kit:

	Progress during 2019	Cumulative progress
Samples analyzed (No.)	370	695
Farmers benefited (No.)	1094	2085
Villages covered (No.)	14	20

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit during 2019-20:

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	1 st April, 2019 to 31 st March, 2020	251	2484	1044	2573
Mobile Soil Testing Kit	1 st April, 2019 to 31 st March, 2020	14	1094	370	1126

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	184	326	-	1) Dr.Umesh Arahunasi Principal,K.H.Patil PU College, Hulkoti 2) Dr.Veeresh Hunagund Deputy Director-1,KSDA, Gadag 3) Dr.M.C.Koravanavar ADA,KSDA, Gadag 4) Shri G.R.Odugoudar President, Mango and Cashew Farmers' Association, Hulkoti 5) Shri V.G.Hiregoudar President, Farmers' Producers Organisation, Hulkoti	4	3

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)
Fall army worm management in Maize crop	72	70	Rs.12,000/ha	Rs.18,000/ha
Sucking pest management in Cashew	43	75	Rs.50,000/ha	Rs.75,000/ha
Pod borer management in Bengalgram crop	154	60	Rs.22,000/ha	Rs.30,000/ha
Azolla as animal feed	86	40	Rs.35,000/cow /lactation	Rs.40,000/cow / lactation
INM in Groundnut	74	35	Rs.25,000/ha	Rs.35,000/ha
Capsule borer management in Safflower crop	62	60	Rs.15,000/ha	Rs.25,000/ha
TS-3R variety of Redgram crop	125	80	Rs.25,000/ha	Rs.35,000/ha
Processing of Foxtail Millet with EDP Skills	35	25	Rs.3000/Qtl	Rs.8000/Qtl

12..B. Cases of large scale adoption

(Please furnish detailed information for each case with suitable photographs)

LARGE SCALE ADOPTION OF CASHEW

Gadag district is predominantly an agrarian district having cultivable land of 3.93 lakh ha. Out of this, only 10 per cent of the area is under irrigation. The district gets rainfall from South-West monsoon from June to September and North-East monsoon from October to November. Average rainfall of the district is 612 mm which is erratic and ill distributed. Recurring agriculture droughts are common with the probability of 70-80 per cent of years . Long dry spells in Kharif season and receding soil moisture in rabi season are the characteristic features of the drought resulting in adverse effect on the sustainability of crop productivity. This situation is more severe in the places where farming is practiced in red soil area. About 30 percent of the soil type in the district is red sandy loam. Majority of the farmers take up groundnut crop during Kharif season in red soil area. The average productivity of groundnut is very low at 6.75 quintals per ha and thus the farming in red soil has become a non-viable enterprise. The livelihood support system of farmers in red soil area is under threat.



In order to address the issue, KVK organised several sensitization programmes in the villages on importance of crop diversification in rainfed areas. Farmers were made aware of cashew cultivation and its economics compared to cultivation of Spreading Groundnut. These programmes created lot of impact in terms of farmers' interest to take up dryland cashew cultivation.

KVK organised Awareness cum Training programmes on Cashewnut cultivation. 36 training courses have been organised for 696 farmers. Exposure visits of farmers have been organised to KVK instructional farm and Cashewnut orchards established by progressive farmers under KVK guidance.

KVK organised Front Line Demonstrations on farmers' fields for Cashewnut promotion. During the period from 2013-14 to 2018-19, KVK organized Front Line Demonstrations in 16 hectares of area covering 41

farmers. These demonstrations have created a huge impact in terms of farmers' interest to take up Cashewnut cultivation.

KVK had collaboration with Directorate of Cashew and Cocoa Development, Cochin, Department of Horticulture and Reliance Foundation for promotion of Cashew. KVK organised Seminars, Farmer-Scientist interaction, field and diagnostic visits and facilitated marketing of raw Cashewnuts. Comprehensive interventions of KVK with convergence mechanism have paved the way for spread of 500 ha. Cashew area in Gadag district.

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

IMPACT ANALYSIS OF MAIZE+REDGRAM INTERCROPPING SYSTEM

INTRODUCTION :

Maize is an important cereal crop cultivated predominantly under rainfed situation in Kharif season in Gadag district. It occupies 15-20 per cent of the total cultivable area. The average productivity of crop decreased from 25 Qtls./ha during last decade to 14 Qtls/ha. during current decade. The major reason for decreased productivity is due to moisture stress caused due to long dry spells during June to August months after sowing. During the last couple of decade, the district has been experiencing climate variability with respect to shift in the rainfall pattern as well as its distribution. This situation has severely affected the productivity of Maize and income of farmers.



KVK INTERVENTIONS :

KVK adopted Mahalingapur village in Gadag taluk under NICRA project. The village is representative village of the district with respect to productivity constraints in Maize. Since Maize is the important crop of the village, KVK made interventions of intercropping of Redgram in Maize in the ratio of 5:1, Short duration TS-3R variety of Redgram was introduced as intercrop. Maize crop suffers from moisture stress during vegetative stage (45-50 DAS) resulting in less yield. On the contrary, Redgram also suffers from moisture stress during early vegetative stage. But later the crop gets sufficient moisture during grand growth period and flowering stage as the crop duration of the Redgram is long (155 days) compared to Maize. Redgram crop escapes moisture stress as sufficient rains coincides with grand growth, flowering and pod formation period.



KVK organised Front Line Demonstration on Maize+Redgram intercropping system in Mahalingapur and surrounding villages of Beladhadi, Kabalayatakatti and Nabhapur. The details of programmes implemented year-wise is presented in Table:-1

Table:1 FLD programme on Maize+Redgram intercropping system

Sl. No	Year	Area (Ha.)	No. of farmers
1	2015-16	8	20
2	2016-17	30	75
3	2017-18	16	40
4	2018-19	20	50
TOTAL		74	185

During four year period, KVK introduced Maize+Redgram intercropping system in 74 ha. covering 185 farmers

DETAILS OF TECHNOLOGIES DEMONSTRATED :

Maize +Redgram intercropping system was demonstrated with following technologies:

- Introduction of Redgram as an intercrop in Maize as Redgram can sustain early and mid-season drought during Kharif season.
- Demonstration of medium duration TS-3R variety in Redgram @7.5kg/ha.
- Seed priming with Calcium Chloride @ 2% to enhance germination percentage, to improve the crop vigour and to induce drought tolerance to the crop.
- Seed treatment with Bio-fertilizers (PSB & Rhizobium) which facilitates drought tolerance in crops through the supply of nutrients.
- Opening of conservation furrows at every 25-30 feet interval at 20-25 DAS for insitu moisture conservation during crop growth period for enhancing moisture availability to the crop.
- Foliar spray of Pulse Magic @ 1% (mixture of micronutrient formulated by UAS, Raichur for pulse crops) during flowering stage for enhancing pod setting percentage and pod development through supplementation of micronutrients.
- Biological control of pest in Redgram for effective control of pod borer through pheromone traps and yellow sticky traps.

RAINFALL PATTERN :

Rainfall data of Mahalingapur cluster of villages is presented in Table-2. The data presented reveals that out of four years the average rainfall of 3 years i.e. 2015-16, 2016-17, 2017-18 and 2018-19 is very less compared to normal rainfall.

Table-2 : Rainfall data in Mahalingapur cluster of villages

Months	Normal	2015-16	2016-17	2017-18	2018-19
		Actual	Actual	Actual	Actual
June	85.20	67.76	110.70	5.90	52.40
July	70.60	8.63	61.00	14.60	9.30
August	75.40	68.50	57.00	47.60	29.10
September	137.40	91.80	141.30	129.40	27.70
	368.60	236.69	370.00	197.50	118.50
% of deviation		-35.78	+0.37	-46.41	-67.85

ECONOMIC PERFORMANCE OF DEMONSTRATION:

KVK demonstrated Maize+Redgram intercropping system along with resilient technologies in 74 ha. covering 185 farmers in Mahalingapur cluster villages during 4 years period. The data presented in Table-3 reveals that average crop equivalent yield of 36 Qtls./ha was achieved in the demonstration plots. The data clearly reveals that there has been doubling of income in demonstration plots compared to sole cultivation of Maize during all the four years. When we look into average net returns, it was triple as against local check. It is interesting to note that these yield level are achieved even during deficient rainfall years (Table:-2)



Table: 3-Economic performance of Maize+Redgram intercropping system

Year	Area (ha.)	No. of farmers	Yield (Qtl./ha.)			Crop Equivalent yield (Qtls./ha.)	Net Returns (Rs./ha.)	
			Demo		Local Maize as sole crop		Demo	Local
			Maize	Redgram				
2015-16	85.20	20	18.40	4.95	21.95	36.96	11374	712
2016-17	70.60	25	14.66	5.60	17.90	33.83	13653	4678
2017-18	75.40	40	20.00	5.75	24.50	42.50	13375	2368
2018-19	137.40	50	21.50	2.98	24.77	30.33	12607	8528
TOTAL	368.60	185	18.59	4.82	22.28	36.00	12752	4071

ADDITIONAL NET RETURNS FROM DEMONSTRATION FIELD :

The data presented in Table-4 reveals that 185 farmers participating in demonstration programme in 74 hectares got Rs.12.50 lakhs as additional returns during 4 year period from 2015-16 to 2018-19. This is one of the good indicator of impact of Maize+Redgram intercropping system. This has created lot of impact in terms of spread of technologies to other farmers.

Table: 4-Additional returns from Maize+Redgram intercropping system

Year	Yield		Additional Yield (Qtls./ha.)	Price (Rs./qtl)	Additional Returns (Rs. /ha)	Total area of demo (ha.)	Total additional returns from demo (Rs.)
	Demo Yield CEY (Qtls/ha.)	Local check (Qtls./ha.)					
2015-16	39.96	21.95	15.01	1200	18012	8	144096
2016-17	33.83	17.90	15.93	1300	20709	30	621270
2017-18	42.50	24.50	18.00	1150	2070	16	331200
2018-19	30.33	24.77	5.56	1400	7784	20	155680
TOTAL						74	1252246

SPREAD OF TECHNOLOGY TO OTHER FARMERS :

As a result of KVK interventions through Front Line Demonstrations, trainings and extension programmes , there has been a spread of the technology in 2100 ha. of area including area under demonstrations during last four years involving 2570 farmers. During 2018-19 itself 1500 ha. of area was brought under Maize+Redgram intercropping system. The spread has been noticed mainly in Mahalingapur cluster of village. This indicates that farmers have been convinced about the profitability of intercropping system. During last four years, 2570 farmers have got net returns of Rs.270 lakhs, thus contributing lot to the district economy.

Table: 5-Year wise approximate spread of area and total net returns in Maize+Redgram intercropping system

Year	Area (ha.)	No. of farmers	Net Returns (Rs./ha.)	Total net returns (Rs.)
2015-16	8	20	11374	90992
2016-17	100	150	13653	1365300
2017-18	500	700	13375	6687500
2018-19	1500	1700	12607	18910500
TOTAL	2108	2570	51009	27054292

CONCLUSION :

Maize+Redgram intercropping system with resilient technologies demonstrated by KVK has created a huge impact in Mahalingapur cluster of villages in terms of good net returns and income of farmers. Farmers have been convinced about the profitability of technologies as good net returns were achieved during drought years of 2015-16, 2017-18 and 2018-19. There has been a spread of technologies in 2500 ha. involving 2570 farmers in Mahalingapur cluster of village in last four years and these farmers got Rs.270 lakhs as net returns. Thus the demonstrations have huge impact in improving the income of farmers in rain shadow district of Gadag

PART XIII - LINKAGES

13.A. Functional linkage with different organizations

Name of organization	Nature of linkage
Directorate of Cashewnut and Cocoa Development, Cochin	i) Awareness on Cashew promotion ii) Organisation of Seminar on Cashewnut crop iii) Training on production technology of Cashewnut iv) Advisory services for cashew farmers
Agriculture Skill Council of India	Organization of Skill Training on job role "Vermicompost Producer and Dairy Entrepreneurship"
Karnataka State Department of Agriculture	Training programmes & serving as Resource Persons in different schemes, joint organisation of extension activities
Karnataka State Department of Horticulture	Capacity building of FPOs
Reliance Foundation	Capacity Building Programme for FPOs and advisory services for farmers
Department of Animal Husbandry and Veterinary Services	Organisation of Workshop on Management of Foot and Mouth Disease and Brucellosis in dairy animals
Shree Kshetra Dharmastala Rural Development Foundation	Training programmes for SHG Members and participation as Resource Person

13.B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Capacity Building of FPOs	June, 2019	Karnataka State Department of Horticulture	3,00,000
Agricultural Skill Council of India	January, 2019	ASCI, New Delhi	3,67,000

13.C. Details of linkage with ATMA

a) Is ATMA implemented in your district : **Yes**

If yes, role of KVK in preparation of SREP of the district?

KVK provided input on problem identification , prioritization, researchable issues and strategies / technologies for different agro-eco systems in the district

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 Interface Meetings and ATMA Steering Committee Meetings	2	5	-
02	Research projects	-	1	1	-
03	Training programmes	<ul style="list-style-type: none"> • ICM • Value addition • Farmers' Producers Organisation • Integrated Farming System 	9	5	-

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
04	Demonstrations	-	5	120	Jointly organized with ATMA funding
05	Extension Programmes		11	10	Jointly organized with ATMA
	Kisan Mela	-	1	1	-
	Technology Week	-	1	1	Jointly organized with ATMA
	Exposure visit	-	-	-	-
	Exhibition	-	1	1	Jointly organized with ATMA
	Soil health camps	-	1	1	Jointly organized with ATMA
	Animal Health Campaigns	-	-	-	-
	Others (Pl. specify)	-	-	-	-
	Field Day	Bengalgram	1	1	Jointly organized with ATMA
	Jal Shakti Abhiyaan	-	1	1	Jointly organized with ATMA
	World Food Day	-	1	1	Jointly organized with ATMA
	International Womens' Day	-	1	1	Jointly organized with ATMA
	World Soil Health Day	-	1	1	Jointly organized with ATMA
	Farmers' field school	-	-	-	-
06	Publications				
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	Other Activities (Pl. specify)				

13.D. Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any

13.E. Nature of linkage with National Fisheries Development Board

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

13.F. Details of linkage with RKVY

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

13G. Kisan Mobile Advisory Services

Month	Message type (Text/Voice)	SMS/voice calls sent (No.)						Total SMS/Voice calls sent (No.)	Farmers (No.)
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
April	Text	0	1	0	1	0	0	2	15233
May	Text	1	0	1	1	0	1	4	15233
June	Text	0	0	1	0	1	1	3	15239
July	Text	2	1	2	0	1	0	6	15239
	Voice	2	0	0	0	1	0	3	98000
August	Voice	2	0	1	0	1	1	5	15239
	Text	5	0	0	0	1	1	7	98000
September	Text	4	1	0	0	0	0	5	15239
	Voice	1	0	0	1	0	0	2	38000
October	Voice	1	0	0	0	0	0	1	15191
November	Text	2	1	0	1	1	0	5	15240
	Voice	2	1	0	0	1	0	4	38000
December	Text	4	1	0	0	1	0	6	15243
	Voice	4	1	0	0	1	0	6	38000
January	Text	1	0	0	0	0	0	1	15243
	Voice	0	0	0	0	0	1	1	38000
February	Text	3	1	0	1	1	1	7	15243
	Voice	3	1	0	1	1	1	7	38000
March	Text	1	1	0	1	2	0	5	15243
	Voice	2	1	0	0	1	0	4	38000
Total		40	11	5	7	14	7	84	606825

PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

14A. 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	Alphonso Mangoes	Grafts	1000	5000	15000	-

14B. 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. (Qtl)	Cost of inputs	Gross income	
Cereals									
Rabi Sorghum	14.11.19	17.03.20	3.0	SPV-2217	Seeds	25.0	6800	87500	
Finger millet	15.08.19	13.12.19	2.10	DHFT-109-3	Seeds	2.5	2020	7500	Crop failed due to heavy rains
Browntop millet	16.08.19	02.12.19	2.70		Seeds	2.0	3300	14000	Crop failed due to heavy rains
Maize	22.08.19	29.12.19	0.50	MRM-4070	Grains	2.5	2000	4500	
Pulses									
Greengram	22.06.19	06.09.19	0.6	DGGV-2	Seeds	3.0	1200	24000	
Bengalgram	06.11.19	14.02.20	0.8	GBM-2	Seeds	5.0	5000	25000	
Bengalgram	16.11.19	07.03.20	0.4	BGD-111-1	Seeds	2.0	4400	10000	
Bengalgram	23.11.19	28.02.20	0.8	JAKI-9218	Seeds	5.0	6600	25000	
Redgram	15.08.19	01.03.20	4.80	TS-3R	Seeds	12.0	22500	72000	Crop failed due to heavy rains
Oilseeds									
Groundnut	28.06.19	04.11.19	1.0	KDG-128	Seeds	17.85	11600	107100	
Groundnut	09-.07.19	31.10.19	1.0	TG-37A, DGRMB-24, DGRMB-32	Seeds	10.5	17750	63000	
Castor	22.08.19	25.01.20	0.40	ICH-66	Seeds	2.5	1950	12500	
Safflower	15.10.19	26.02.20	3.2	ISF-764	Seeds	35.0	22800	157500	
Summer Groundnut	23.12.19	08.05.20	0.4	DH-256	Seeds	5.0	5750	30000	
Fibers									
Spices & Plantation crops									
Cashewnut			1.20	Vengurla-4	Nuts	7.0		91000	-
Floriculture									
Fruits									
Tamarind			0.60	PKM-1 & DTS-1	Fruit	25.0		100000	-
Amla			0.60	Krishna, Kanchan	Fruit	7.51		15020	-
Mango			0.80	Alphonso	Fruit	3.0		24000	-

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty. (Qtl)	Cost of inputs	Gross income	
Guava			1.00	Lucknow-49	Fruit	5.0		5000	-
Sapota			1.00	Cricket ball	Fruit	5.3		5300	-
Vegetables									-
Onion	03.07.19	15.11.19	1.2	Bhima super	Bulb	20.0	15100	60000	-
Onion Seed production	03.12.19	08.04.20	0.4	Bhima super	Seeds	0.75	78200	112500	
Others (specify)									

14C. 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	130.0 Qtl	23611	39000	-
2	Earthworms	1.90 Qtl	12500	62120	-
3	Azolla	0.33 Qtl	1600	3300	-

14D. 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	465 lit	14500	18600	-
2	Sheep	Rambullet local cross	Lamb	2 lamb	3000	13000	-
3	Goat	Jamunapuri local cross	Kid	2 kid	4000	11000	-
4	Poultry	Swarnadhara	Egg	247	700	1840	-

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)
April 2019	54	2	-
May	22	2	-
June	30	29	-
July	25	29	-
August	45	30	-
September	57	10	-
October	26	17	-
November	26	12	-
December	110	20	-
January 2020	40	29	-
February	0	0	-
March	0	0	-

14F. Database management

S. No	Database target	Database created
1	OFT	Already maintained
2	FLD	Already maintained
3	Training database	Already maintained

S. No	Database target	Database created
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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.		Activities conducted					Quantity of water harvested in '000 litres	Area irrigate / utilization pattern
				No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
100000	100000	Graded bund construction	5054.68 cm	6	7	0	263	24	108	1.13 ha
		Construction of waste weirs								
		1)1.52 feet crust length	5 Nos.							
		2)1.83 feet crust length	7 Nos.							
		3) 2.44 feet crust length	4 Nos.							
		4) 2.74 feet crust length	3 Nos.							
		5) 3.00 feet crust length	3 Nos.							
		Farm pond	2 Nos.							
		Infiltration wells								
		a)Infiltration Well	9 Nos.							
		b)Common tank	1 No.							
		Bore well recharge pit	1 No.							
		Sub surface dam	2 Nos.							
		Soak pits	147							
		Drip irrigation system for Dry land Horticulture	5 Ha.							
		Check dam	1							

PART XV – SPECIAL PROGRAMMES**15.1 Paramparagath Krishi Vikas Yojana (PKVY) :**

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)
1	Shirahatti	62.50 to 162.50 Kgs/ha. Low	1.25 to 6.25 Kgs/ha. Low	90 to 210 Kgs/ha. Low to medium	0.16 to 0.34 Kgs/ha. Low	<ul style="list-style-type: none"> • Vermicompost • Jeevamruta • Beejamruta • Panchagavya 	Foxtail Millet	DHF t-109-03	i) Seed treatment with Beejamruta @ 5% ii) Soil application with 2 tons of Vermicompost enriched with Jeevamruta	8.98	18858	8079
							Rabi Sorghum	SPV - 2217	i) Seed treated with Beejamruta at 5% ii) Vermicompost @ 2 ton per ha. enriched with Jeevamruta	6.63	14471	8720
							Wheat	Kiran	i) Seed treated with Beejamruta at 5% ii) Vermicompost @ 2 ton per ha. enriched with Jeevamruta	6.62	17650	4210

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)
								ruta iii) Yellow sticky traps				
						Bengal gram	JG-11	i) Seed soaking with Beejam ruta @ 5% and seed treated with Trichoderma @ 10 gm/Kg ii) Seed treatment with Rhizobium @ 1250 gm/ha & PSB @ 1250 gm/ha iii) Soil application of Vermicompost enriched with Jeevam ruta @ 2.5 ton/ha iv) Spray of Nimbicidine @ 2 ml /lit with Panchagavya @ 5% v) Spray of Agni-astra @ 10% vi) Yellow	6.98	19910	10784	

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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

15.9 Nutri Garden

Nutri garden plays an important role in providing good nutrition to farm families. Though it is important many farm families are not cultivating vegetables and fruits in the backyard or in the farm for home consumption. They used to buy the vegetables and fruits from the market. Fluctuations in price and the non-availability of fruits and vegetables locally lead to nutrition deficiency. In order to promote the consumption of nutritionally rich and chemical free fruits and vegetables the nutritional gardens were established in DFI villages of Gadag district.

Objectives:

- To promote nutrition garden in farm families
- To reduce cost incurred on purchase of vegetables
- To know the nutritional status of farm women before and after the implementation of nutrition garden
- To reduce Malnutrition and nutrition deficiency disease
- To promote organic methods of pest control & bio-fertilisers
- To know the nutritional adequacy before and after establishment of nutri garden

General Information of the families (N=45)

Particulars	Categories	Numbers
Age	25-35	15
	35-45	19
	45-55	6
Categories	SC	-
	ST	-
	Others	45
Occupation	Agriculture	43
	House wives	2
	Others	-
Education status	Illiterate	10
	Primary	26
	Secondary	9

Average monthly income of families	Rs.6000/-	
Expenditure pattern	Food	2800
	Education	500
	Health and medicine	450
	Fruits and vegetables	1200
	Others	1000
	Total Rs. 5950/-	

Activities conducted

- Provided vegetable seeds like brinjal, tomato, chilli, radish, beetroot, carrot etc., leafy vegetables like palak, amaranthus, methi, shepu etc., fruit plants and spices like Guava, Papaya, lime, drumstick, curryleaf etc. and seeds of super foods like Chia, Quinoa, Grain Amaranth
- Training to farm women on nutri garden : 6 Nos.
- Awareness on health and nutrition : 8 Nos.
- Field days : 3 Nos.
- Exposure visit : 6 Nos.
- Field visits : 22 Nos.

Results

1) Production of vegetables

Quantity of leafy vegetables produced (Area: 38 Guntas, 0.5-1 Gunta/demo)

Palak (Bundles)	Amaranthus (Bundles)	Shepu (Bundles)	Hunchik (Bundles)	Coriander (Bundles)	Spring Onion (Bundles)	Radish (Bundles)	Total (Bundles)
747	628	610	620	603	528	594	4330

Quantity of other vegetables produced (Area: 38 Guntas, 0.5-1 Guntas/demo)

Brinjal (Kg.)	Tomato (Kg.)	Beetroot (Kg.)	Carrot (Kg.)	Ridge Guard (Kg.)	Cluster Beans (Kg.)	Cucumber (Kg.)	Total
578	544	366	256	548	231	240	2763

Total Production of Leafy Vegetables, Other Vegetables and B.C. Ratio

Quantity of leafy vegetable produced	Rate per bundle (Rs.)	Quantity of other vegetables produced (Kg.)	Rate per Kg of vegetable (Rs.)	Total (Rs.)	Gross Cost (Rs.)	Gross Return (Rs.)	Net Return (Rs.)	B.C. Ratio
4330	4	2763	40	115320	25000	115320	90320	4.61

Percentage adequacy of vegetables

Parameters	Quantity produced / availability
Quantity of vegetables produced / month / family	15.64 Kg
Average availability of vegetables / day / person	130 gms
Percentage adequacy of vegetables	37.14 %

Average consumption of nutrients and percentage adequacy before and after implementation of nutri garden

Nutrients	RDA#	Before Intervention		After Intervention	
		Mean	Percentage adequacy	Mean	Percentage adequacy
Energy (K calories)	2230	1674.67	75.10	1885.61	84.56
Protein (gms)	55	44.10	80.18	47.07	85.58
Fat (gms)	25	15.84	63.37	19.92	79.69
Fibre (gms)	30	9.38	31.28	10.51	35.02
Iron (mg)	21	18.18	86.57	18.59	88.51
Calcium (mg)	600	248.60	41.43	311.06	51.84
Carotene (Micro gm)	4800	1076.05	22.05	1701.66	34.87
Vitamin C	40	30.25	75.61	35.66	89.15

FEEDBACK OF FARM WOMEN ON NUTRI-GARDEN

- The Nutri Garden established at the backyard of house and in the farm helped to get fresh vegetables throughout the season.
- The amount spent towards purchase of vegetables has been reduced from Rs.19,200 per year to Rs.7200 per year.
- The consumption of leafy vegetables has increased from twice a week to 4 – 5 times a week.
- The percentage adequacy of nutrients after the implementation of Nutri Garden has increased among farm women.
- Th farm women expressed the happiness about the Nutrition Garden as they came to know about the cultivation of Betroot, Carrot, Hunchik and consumption of these vegetables has increased.

PART XVI - FINANCIAL PERFORMANCE

16A. 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
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16B. Utilization of KVK funds during the year 2019-2020 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	16500000	16500000	16031289
2	Traveling allowances	135000	135000	134968
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	250000	250000	249937
B	POL, repair of vehicles, tractor and equipments	300000	300000	299908
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	150000	150000	149970
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	50000	50000	49960
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	414000	414000	413919
F	On Farm Testing (on need based, location specific and newly generated information in the major production systems of the area)	68000	68000	67700
G	Integrated Farming System	0	0	0
H	Training of Extension Functionaries	25000	25000	25000
I	Extension activities	35000	35000	34960
H	Farmers' Field School	30000	30000	30000
I	EDP / Innovative activities	60000	60000	59992
J	Maintenance of buildings	50000	50000	49990
K	Establishment of Soil, Plant & Water Testing Laboratory and issue of Soil Health Cards	25000	25000	25000
L	Maintenance of building	125000	125000	124788
M	Nutri Garden	25000	25000	24970
M	Library Maintenance	10000	10000	9960
TOTAL (A)		18172000	18172000	17702321
B. Non-Recurring Contingencies				
1	Works	0	0	0
2	Equipments including SWTL & Furniture	0	0	0
3	Vehicle (Four wheeler/Two wheeler, please specify)	0	0	0
4	Library (Purchase of assets like books & journals)	0	0	0
TOTAL (B)		0	0	0
C. REVOLVING FUND		0	0	0
GRAND TOTAL (A+B+C)		18172000	18172000	17702321

16C. Status of revolving fund (Rs. in lakh) for the last three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2017 to March 2018	6.087	37.325	42.071	1.341

April 2018 to March 2019	1.341	28.856	24.064	6.133
April 2019 to March 2020	6.133	21.419	19.246	3.96

17. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.L.G.Hiregoudar	Senior Scientist and Head	Workshop on Food processing technologies developed by CFTRI, Mysuru	Hotel Capitol, Bengaluru	29 November 2019
Mr.V.D.Vaikunthe	SMS (Agronomy)	Training on LRI under Sujala-III	NBSS & LUP, Bengaluru	20 April 2019
Ms. Hemavati Hiregoudar	SMS (Horticulture)	Regional Horticultural Research, Extension, Advisory & Project Formulation Workshop (Northern Region)	KRCCH, Arabhavi. UHS-Bagalkot	29-30, May 2019
		National level seminar on Cashew	Bramavara organised by DCCD, Kochi	31 July – 2 August, 2019
		Recent advances in Scientific Fruit crops cultivation	IIHR, Bengaluru	12 November, 2019
		Faculty development programme for KVKs of Southern states	EEl, Hyderabad	24-29, February 2020
		TOT for nursery worker	Sri Sai Institute of Agricultural Sciences & Technology, Bengaluru	07 March 2020
Mr.S.H.Adapur	SMS (Ag. Extension)	Meeting on Vacuum packaging in Chilli at APMC, Byadagi	APMC. Byadagi	21-06-2019
		National level seminar on Cashew	Brahmavara organised by DCCD, Kochi	31 July – 2 August, 2019
		International conference on strengthening of Agricultural Research & Development	ICAR-KVK, Suttur	14-16, December 2019
Dr. Sudha V. Mankani	SMS (Home Science)	Eco-friendly enterprises	VIKASANA, Institute for Rural and Urban Development, Mandya	12-13, July 2019
		Workshop on nutri garden	KVK, Tumkur	05 August 2019
		Entrepreneurship Development Programme	IIHR, Bengaluru	19 October 2019
		Workshop on Food processing technologies developed by CFTRI, Mysuru	Hotel Capitol, Bengaluru	29 November 2019

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
		National Conference of KVKs	NASC Complex, New Delhi	28 February-01 March, 2020
Mr.N.H.Bhandi	SMS (Soil Science)	Training on LRI under Sujala-III	NBSS & LUP, Bengaluru	20 April 2019
		Livelihood security of farmers through technology interventions in salt affected soils	ICAR-CSSFT, Karnal, Haryana State	31 January – 7 February, 2020

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

i) EDP THROUGH PRIMARY PROCESSING OF MILLETS AND SALES OF PROCESSED MILLET GRAINS

Milletts are the important crops grown in Gadag district. Farmers used to sell the un-processed Milletts which fetches low price in the market. In addition, they are not aware of the Millet nutrition and value addition of milletts. In order to promote the daily consumption of Milletts and to get higher returns from the Milletts, the EDP on Primary Processing and Marketing of Milletts was done.

Objectives:

- To get good market price for the processed grains
- To imbibe EDP skills in production & marketing for small farmers
- To enhance returns from millet cultivation
- To create awareness on millet nutrition, value addition & promote daily consumption of milletts

Activities conducted:

- Implemented EDP by taking 3 farm families.
- 12 trainings to farmers and farm women on crops and millet nutrition.
- 9 trainings to Extension Functionaries on Millet Nutrition.
- 2 value addition trainings.
- Developed brochures & Pamphlets on Milletts.
- Exhibitions and fairs organised in collaboration with KSDA, organic farmers associations for promotion and marketing of Milletts.
- Facilitated sales of millet products through ASF's Organic Store
- 2 Entrepreneurship Development Programmes on Milletts was organized.
- Prepared labels & pamphlets to facilitate marketing of Milletts.

Sl. No.	Name of the farmer	Place	Name of value added product	Income without processing (Rs.)	Income with processing (Rs.)/\Qtl												Net income (Rs.)
				Market value of un processed grains/ Qtl	Processing charges / Qtl	Waste (Kg/Qtl)	Good quality marketable grains after primary processing (Kg/Qtl)	Price / Qtl of processed grains (Rs.)	Gross Income/ Qtl (Rs.)	Net Income / Qtl (Gross income - processing charges (Rs.))	Total quantity processed (Qtls)	Processing charges (Rs.)	Good quality grains after primary processing	Gross income (Rs.)	Without processing (Rs.)	With processing (Rs.)	Additional profit gained (Rs.)
3	Smt Shashikala Govindappa Nagavi	Hulko ti	Foxtail Millet	2000	800	30 Kgs	70 Kgs	10000	7000	6200	1	1600	140 Kgs	12400	4000	8400	4400
			Little Millet	2500	800	40 Kgs	60 Kgs	10000	6000	5200	1	800	60 Kgs	5200	2500	5200	2700
			Ragi	2500	400	75 Kgs	1 Qtl	6000	4500	4100	1	400	75 Kgs	4100	2500	4100	1600
			Ragi Flour	2800	400	-	1 Qtl	7000	7000	6600	1	400	100 Kgs	6600	2800	6600	3800
			Korale	3500	800	40 Kgs	60 Kgs	18000	10800	10000	1	800	60 Kgs	10000	3500	10000	6500
			Baragu	3000	800	40 Kgs	60 Kgs	10000	6000	5200	1	800	60 Kgs	5200	3000	5200	2200
Additional income realised by farmers through primary processing of millets																21200	
(A) TOTAL AMOUNT (RS.) Realised through primary processing																43200	

EDP THROUGH SECONDARY PROCESSING OF MILLETS AND SALES OF VALUE ADDED PRODUCTS OF MILLETS

Name of the farmer	Place	Name of value added product	Income without processing (Rs.)	Income with processing (Rs./\Qtl)							Net income (Rs.)		
			Market value of un processed grains/Qtl	Raw material charges	Price/Kg of the product	Gross income	Net Income/Qtl (Gross income - Raw material charges)	Total quantity of value added product prepared	Raw material charges	Gross income (Rs.)	With out processing	Net Income/Qtl (Gross income - Raw material charges)	Additional profit gained (Rs.)
Smt Shashikala Govindappa Nagavi	Hulkoti	Navane Muruku	2000	180	350	350	170	20 Kgs	1800	5200	200	3400	3200
		Finger Millet Muruku	2500	150	350	350	200	20 Kgs	1500	5500	250	4000	3750
		Samae Muruku	2500	180	350	350	170	20 Kgs	1800	5200	250	3400	3150
		Korale Muruku	3500	220	400	400	180	20 Kgs	2200	5800	350	3600	3250
(B) Additional income realised by farm women through secondary processing of millets												13350	

Details of Millet food supplied by Entrepreneur in Fairs and Exhibitions (Shri Ashok Halli, Shagoti village)

Sl. No	Name of exhibition / fair	Meals (nos.)	Rate per meal (Rs.)	Tiffins (nos.)	Rate per tiffin (Rs.)	Total amount of meals (Rs.)	Total Amount of Tiffin (Rs.)	Expenditure (Rs.)	Net income (Rs.)
1	Krishi Mela (UAS, Dharwad)	150	75	90	40	11250	3600	6500	8350
2	Raita Sneha Sammelana (Organised by KSDA, Dharwad)	200	75	0	0	15000	0	7000	8000
3	Hampi Utsav (Support by KSDA, Koppal)	300	60	150	40	18000	6000	11000	13000
4	Millet Mela & Organic Mela (Bengaluru)	200	100	0	0	20000	0	10000	10000
5	Rajeshwari Math Fair (Hulkoti)	0	0	100	40	0	4000	500	3500
						(C) Additional income realised through field preparation with millets			42850

Millet Food : Rotis of Foxtail Millet, Rice of Browntop Millet , Pulses, Vegetables etc.,

Total

(A) 43200.00

(B) 13350.00

(C) 42850.00

99400.00

CONCLUSION: 3 farmers got Rs.99400/- an additional income through this EDP

ii) EDP ON VALUE ADDITION AND MARKETING OF TAMARIND

Tamarind as the age old crop grown in Gadag distict. Farmers used to lease the plants which fetches low price in the market. In order to promote value addition and to get higher returns from the Tamarind, the EDP on value addition and marketing of Tamarind products was initiated.

Objectives:

- To imbibe EDP skills in marketing of Tamarind products
- To get an additional employment through preparation of Tamarind products
- To enhance the income of farm families

Activities conducted:

- Implemented EDP by taking Pruthvi SHG from Shingatarayanakeri village of Mundaragi block
- Three training on value addition and 3 trainings on packing, labeling and marketing of Tamarind products
- Prepared labels and facilitated packing materials for marketing of tamarind products
- Facilitated to participated in Exhibition & fairs for marketing of Tamarind products
- Initiated sales of Tamarind products to ASF's Organic Sales Unit and local shops & petty shops

Name of the SHG	Name of the SHG Member	Village	Taluk	Date of initiation
Pruthvi SHG	Renuka Mahalingappa Shirund	Singatarayanakeri	Mundaragi	13-01-2020
	Kallavva Irappa Banavi			
	Jayashree Mahesh Ruddanavar			

Production of tamarind products

Name of the product	Quantity produced (2 months period)	Rate / Piece or Kg (Rs.)	Total (Rs.)
Tamarind lollypop (Big size)	2500 nos.	4	10000
Tamarind lollypop (Small size)	4200 nos.	1.5	6300
Tamarind chutney	15 Kg	120	1800
		Total (Rs.)	18100

CONCLUSION : 3 farm women got Rs.18100/- as additional income through EDP on value addition in Tamarind