



UNIVERSITY OF HORTICULTURAL SCIENCES BAGALKOT



ANNUAL PROGRESS REPORT

(APRIL 2017 TO MARCH 2018)



**ICAR- KRISHI VIGYAN KENDRA
KOLAR (KARNATAKA)**

KVK Address and Host Organization details

ICAR-Krishi Vigyan Kendra, N.H-75, Tamaka, kolar-563103 Phone 08152-243099, 9480696395, Fax: 08152-243208, e-mail : kvk.kolar@icar.gov.in , Web site: www.kvkkolar.in	University of Horticultural sciences, Udyanagiri, Bagalkot-587104 www.uhsbagalkot.edu.in
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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
ICAR-Krishi Vigyan Kendra, N.H-75, Tamaka, Kolar-563103	Office 08152-243099	Fax 08152-243208	kvk.kolar@icar.gov.in kvkkolar2012@gmail.com	www.kvkkolar.in

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

Address	Telephone		E mail	Web Address
	Office	Fax		
University of Horticultural Sciences, Udyanagiri, Bagalkot-587104 Karnataka, India.	8354-230351	08354 – 230364	vc@uhsbagalkot.edu.in de@uhsbagalkot.edu.in	http://www.uhsbagalkot.edu.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
K. Thulasiram	9448633234	9480696395	thulasiram_1968@yahoo.co.in

1.4. Year of sanction: December, 2012

1.5. Staff position as on 31 March 2018

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	K.Thulasi Ram	Senior Scientist & Head	M	Entomology	M.Sc(Agri)	37400 - 67000	46440	26/12/2012	Permanent	Others
2	Scientist/SMS	Dr. Raghunatha Reddy R.L.	Scientist	M	Soil Science	Ph.D, PDF	15600 - 39100	17610	31/1/2015	Permanent	Others
3	Scientist/SMS	Dr. K.R. Shashidhar	Scientist	M	Sericulture	Ph.D	15600 - 39100	17610	17/01/2014	Permanent	SC
4	Scientist/SMS	Dr. Noorulla Haveri	Scientist	M	Plant pathology	Ph.D	15600 - 39100	17610	27/01/2014	Permanent	OBC
5	Scientist/SMS	Dr. Nagaraj K.S.	Scientist	M	Horticulture	Ph.D	15600 - 39100	15600	11/05/2015	Permanent	SC
6	Scientist/SMS	Dr. Chikkanna G.S.	Scientist	M	Home science	Ph.D	15600 - 39100	15600	22/06/2016	Permanent	Others
7	Scientist/SMS	VACANT									
8	Programme Assistant (Lab Tech.)	VACANT									
9	Programme	C.S. Gnana	Prog. Asst.	F	Computers	MCA	9300-	10560	27/01	Permanent	SC

7	Threshing floor						
8	Farm godown						
9							
10							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero ZLX (Four Wheeler)	12/06/2014	663706	90578	Running
Hero splendor (Two Wheeler)	12/05/2013	54600	13032	Running
Honda Activa (Two Wheeler)	31/12/2013	61345	12661	Running

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Vegetable preservator	2014	3000	Good
Sealing machine	2014	1700	Good
Gas cylinder and stove	2014	5857	Good
Mixer and juicer	2014	4200	Good
Micro Oven	2014	5800	Good
Pressure cooker	2014	1400	Good
Electronic balance (6 kg)	2016	6646	Good
Weighing balance (60 kg)	2016	9495	Good
Vegetable Handy Planter	2016	2000	Good
Branded Heavy duty load bearing cabinet (Steel Almirah)	2016	14470	Good
Branded carware brand caned seating ('S' type full arm chair)	2016	2445	Good
Knock down Type seating (Wooden peacock chair)	2016	4567	Good
Branded Indexed Cabinet 4 Drawer filing cabinet with 100 CFF(Filing cabinet)	2016	17458	Good
Branded officers Desking (T-9 Table) with 18 mm PLB Top	2016	12033	Good
Jack Fruit Chips machine	2016	8800	Good
Nikon D5300 (with free gb card + carry case +HDMI cable)	2016	34800	Good
Sealing Machine	2017	1000	Good
ISI A,, "Taypcerana Bee hive Box	2017	17600	Good
Branded 12 Pigeons Wooden magazine display cabinet	2017	24390	Good
Steel Book case	2017	14470	Good
Branded officers steel table	2017	11877	Good
Remote calling bell	2017	400	Good
Dell Desktop system	2017	36500	Good
Canon Printer LBP 2900	2017	7800	Good
Hydroponic system unit(1)(72 tray)	2017	30000	Good
Soil sampling Augur set	2017	19980	Good
Executive Revolving chair	2017	12159	Good
Executive table	2017	16299	Good
Officers Revolving chair	2017	58212	Good
Pulp boiling machine	2017	94447	Good
Conventional pulp making machine	2017	54500	Good
Pulp making machine all contact parts made of food grade 304 stainless steel	2017	31700	Good
Digital Hand held refractometer for invert sugar	2017	27000	Good
Digital PH meter make: systronics india Mode 335	2017	14500	Good
Racks 6 ft (8 Angle & 6 Plates)	2017	3600	Good
Toshiba e -studio xerox machine	2017	86000	Good
Acer Desktop Computer	2017	99900	Good
Mridaparikshak soil testing Kit(Mini lab)	2017	86000	Good
Logitech webcam	2017	900	Good

Logitech R400 Presenter	2017	3120	Good
Logitech Mouse wireless	2017	700	Good
Flame photometer	2017	73758	Good
Hand operated cocoon deflossing machine	2017	8000	Good
Water bath circulator	2017	88500	Good
Analytical Balance	2017	67850	Good
EC meter	2017	98530	Good
Kjeldahl apparatus	2017	215800	Good
AAS unit	2017	1489000	Good
Double distillation unit	2017	167000	Good
CC Camera	2017	34700	Good
Desk top	2017	47800	Good
All in one Printer	2017	18000	Good

1.8. Details of SAC meeting conducted during 2017-18

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
04.11.2017	35	Initiate an innovative approach to invite/ reach farmers on a fixed day in a week. SMSs shall fully devote themselves for meeting the visitors on this day.	All KVK Scientists are available on Monday and are giving suggestions to farmers under the banner of Prativaara Parihara	
		Open a sales counter near the entrance (main gate) in which micronutrient mixtures, planting material, seeds, bio agents and value added products could be made available to farmers.	Design and cost has been worked out and proposal submitted to the University	
		Obtain license for production of IIHR Vegetable Special using KVK revolving fund and produce the same keeping demand from farmers in view.	Proposal has been sent. But as the cost of license is Rs.3.0 lakhs, not yet decided to purchase	
		Conduct campaigns and demonstrations to popularise Kamal Kisan model vegetable transplanter in association with KSDH and KSDA.	A vegetable transplanter demonstration was conducted in Akkammanadinne	
		Create awareness about latest technologies by effective use of ICT tools like social media. Increase the number of messages through KMAS.	Sericulture and Pomegranate whatsapp groups are created. Weekly 2-3 messages are being sent.	
		Projects on mechanization in horticulture to be submitted to various funding agencies especially on mango tree pruner.	Will be submitted soon	
		Open a consultancy office in collaboration with KSDH in their premises and provide technical service to the visiting farmers once in a week	Discussed with DDH and working on the possibilities of providing space.	
		KVK website to be launched at the earliest	Launched	
		Suggested to submit the radio talk and TV talk topics list every month to ADRE, Bengaluru for further discussions with AIR and DD officials.	Being submitted every month	
		Suggested to make small video clippings of successful interventions in demonstrations and upload the same in you tube and KVK portal.	Video clippings are made in sericulture	
		Make whatsapp groups of crop specific farmers and share	Pomegranate,sericulture	

		information on advanced technologies	cashew, mango groups are created	
		The results of FLD and OFTs to be published in scientific Journals in the form of research papers.	Four articles have been sent to Journal of Krishi Vigyan and International Journal of Current Microbiology and Applied Sciences	
		An OFT to standardize pruning techniques in tree mulberry may be proposed	Discussed with 3 tree mulberry farmers but unwilling to give plantations	
		Market related information to be sent through KMAS.	Will be sent	
		Conduct Skill Development Trainings on aspects like propagation techniques to rural youth	Will be conducted this year	
		Package of practices for important crops of the district should be updated and uploaded in the KVK portal	Field crops and few horti. crops have been uploaded	
		Farmers should be categorised based on the crops and crop specific messages should be sent to only those groups through KMAS	Farmers are categorized like sericulture farmers, pomegranate farmers, cashew farmers, mango and tomato.	
		Bio agents like <i>Trichoderma</i> , <i>Pseudomonas</i> should be produced and sold under revolving fund of KVK.	Infrastructure not available	
		Invite lead bank Manager and NABARD officials to vocational training programmes for facilitating loan services.	Will be involved during 2018-19 training programmes	
		Prepare the list of major technological interventions in important crops of the district for doubling the farmers income and submit to the ATARI, Bengaluru immediately.	Report submitted	
		Safety kit should be used while spraying at least in FLDs and same to be popularised in farmers fields through demonstrations and trainings.	Has been taken care	
		Disease free seed tubers in potato to be produced under technical supervision of KVK Scientists in farmers fields. The same seed has to be tested in Hassan next year and if found healthy, may be taken up on a large scale.	Discussed with DDH, Chikkaballapur and will be taken up this year	
		Precession farming technology in vegetables developed by KVK, Dharmapuri may be tried in Kolar by visiting the fields in Dharmapuri District, Tamil Nadu.	Will be implemented during 2018-19	
		To take up demonstrations by using improved varieties.	In crops like ragi, groundnut, foxtail millet and kodo millet, this year FLDs have been planned	
		Improved and drought resistant varieties have to be tested for tree mulberry cultivation	Improved variety G-4 is demonstrated in FLD	
		Training programmes to be conducted on safe use of pesticides.	In majority training programmes, emphasis is given for safe use of pesticides	

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise	
1	Irrigated (bore well)	Tomato- Polebeans, Potato, Ragi, Vegetables, Mulberry, Coconut, Sapota, papaya, Guava etc.
2	Tank Irrigated	Paddy
3	Rainfed	Ragi based mixed cropping, Groundnut based intercropping, Maize, Pigeon pea, Horse gram, Field bean, Mango, Cashew, Tamarind etc.
4	Enterprises	Sericulture, Dairy, Poultry, Sheep and Goat rearing

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

S. No	Agro-climatic Zone	Characteristics
1	Eastern dry zone	This zone consists of an area of 1.808 mha. The annual rainfall ranges from 679.1-888.9 mm. More than 50 % of it is received during the Kharif season. The elevation is 800-900 m and the soils are red loamy in major areas, lateritic in the remaining areas

S. No	Agro ecological situation	Characteristics
1	Semi –arid climate	The district receives an annual rainfall of 744 mm received in 45 rainy days. The duration of the monsoon, however, seems to be shrinking with the first three months in the year receiving very little rainfall in recent times. The rainfall distribution has two peaks, one during May and another during September. It is characterized by erratic and uneven distribution. Predominantly the tube wells/bore wells are the major source of irrigation in the district. There are about 41,311 ha of land being irrigated through such bore wells. The number of irrigation pump sets existing in the district is 50,366. Tanks and open wells are the other sources of irrigation.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Medium deep, red clayey soil	Red to a bright reddish-orange in color. They are typically quite acidic, often having a pH of less than 5.	7026
2	Medium deep, red gravelly soil	Red in color which is mainly due to ferric oxides. They are usually poor growing soils, low in nutrients and humus.	17946
3	Deep, red clayey loam soil	Clay loam is a soil mixture that contains more clay than other types of rock or minerals. These soils contains a good amount of plant nutrients and supports most types of plants and crops	88400
4	Deep, red clayey soil	Soil mixture contains less clay component. Nutritionally poor.	119720
5	Deep, red gravelly clay soil	Same as clayey loam but gravelly in nature	20363
6	Deep, lateritic clayey soil	These soils are rich in iron and aluminium. Nearly all laterites are rusty-red because of iron oxides.	16813
7	Deep, lateritic gravelly clayey soil	Characteristically similar to the lateritic clayey but stony and gravelly nature less suitable for arable crop cultivation	10940
8	Deep, alluvial clayey soil (salt affected)	A soil deposit developed on floodplain and delta deposits. Soil supports good crop growth.	92843
9	Red gravelly clay soils (Rocky land)	They are less clayey and sandier and are poor in important minerals like lime, phosphorous and nitrogen. Red soil is acidic like that of the Lateritic soil.	11036

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
Field crops				
1.	Ragi	58207	104582	1796 kg/ha
2.	Ground nut	10513	14187	1349 kg/ha
3.	Avare	8023	4028	502 kg/ha
4.	Tur	3401	4213	1238 kg/ha
5.	Maize	1133	4523	3992 kg/ha
6.	Cowpea	1600	139	274 kg/ha
7.	Horse gram	628	970	1544 kg/ha
Vegetable crops				
8.	Tomato	9695	547753	56.5
9.	Potato	6951	107928	15.53
10.	Beans	3299	34640	10.50
11.	Cabbage	1758	34039	19.36
12.	Knol-khol	1605	25680	16
13.	Green chilli	1441	29463	20.45
14.	Carrot	1387	27047	19.50
15.	Brinjal	1235	39520	32
16.	Radish	1029	12348	12
17.	Cauliflower	732	12078	16.5
18.	Onion	525	5522	10.51
19.	Capsicum	450	9000	20
20.	Ladies finger	322	2898	9
Fruit crops				
21.	Mango	46772	374176	8
22.	Banana	3720	123405	3317
23.	Sapota	3403	52320	15.37
24.	Guava	565	12400	21.95
25.	Papaya	367	27628	75.28
26.	Grapes	219	4284	19.56
27.	Citrus and its sps.	78	1558	19.90
28.	Pomegranate	42	1016	24.06
Plantation crops				
29.	Coconut	6657	691	0.10
30.	Cashewnut	2196	4246	1.93
31.	Arecanut	4	6	1.49
Aromatic crops				
32.	Davana	774.00	7660.00	9.90
33.	Geranium	65.00	924.00	14.22
Spice crops				
34.	Tamarind	3489	14656	4.20
35.	Coriander	233	153	0.66
36.	Ginger	163	1837	11.27
37.	Dry chilli	150	275	1.83
38.	Turmeric	43	397	9.22
Flower crops				
39.	Marigold	655.00	6395.00	9.76
40.	Rose	556.00	963.90 (Lakh flowers)	1.73
41.	Chrysanthemum	210.00	2995.00	14.26
42.	Aster	162.00	1567.00	9.67
43.	Jasmine	161.00	1101.00	6.87

44.	Crossandra	100.00	500.00	5.06
Sericulture				
45.	Mulberry	18790	751600	40000
46..	Cocoon production	18709 Farmers	12772	712

Statistical survey Dept of Agriculture and Horticulture (2017)

2.5. Weather data

Month	Rainfall (mm)		Temperature ° C		Relative Humidity (%)	
	Normal	Actual	Maximum	Minimum	Max.	Min.
January, 2017	3.80	5.00	29.2	17.3	87.7	51.77
February	5.40	0.06	33.8	12.8	73.64	33.75
March	11.20	30.90	34.3	14.4	68.90	36.45
April	29.00	30.26	36.9	19.6	79.20	39.60
May	84.20	157.50	36.3	19.3	62.00	24.50
June	53.80	52.14	36.0	22.5	73.50	46.60
July	76.00	36.96	31.5	20.6	71.60	45.80
August	87.00	129.32	34.5	23.2	83.40	56.40
September	145.20	257.64	28.5	19.9	87.50	59.30
October	143.80	314.94	29.9	18.3	92.30	73.23
November	60.40	37.86	28.2	16.7	87.63	76.83
December	24.20	3.70	28.6	13.5	88.33	65.23
Total	724.00	1052.00				

Dept. of Agriculture, Kolar

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	173620	-	-
<i>Indigenous</i>	55416	-	-
Buffalo	45876	-	-
Sheep			
<i>Crossbred</i>	2197	-	-
<i>Indigenous</i>	442903	-	-
Goats	86263	-	-
Pigs			
<i>Crossbred</i>	2385	-	-
<i>Indigenous</i>	1872	-	-
Rabbits	312	-	-
Poultry			
4275529			
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>	38.76 lakh (Fish seed stock)	1848 tons	-
Prawn			
Scampi			
Shrimp			

Kolar Dist at a glance, Dist. Statistical Officer, 2015-16

2.7 District profile has been **Updated** for 2017-18 Yes / No: Yes

2.8 Details of Operational area / Villages

Sl.No.	Taluk/block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kolar	Busanahalli Kolaganjanahalli	1 year	Ragi, Avare, redgram, tomato, potato, Sericulture	Local varieties, low yields, Delayed sowing, Improper rainfall distribution and blast incidence	Yield optimization through improved varieties
2	Kolar	Bayappanahalli	1 year	Redgram,Ragi, avare, tomato,beans, Sericulture	Wilt & sterility mosaic incidence , improper nutrient management and incorrect & indiscriminate use of PP chemicals	Integrated crop management
3	Kolar	Uppukunte	1 year	Redgram,Ragi, avare, tomato,beans, Sericulture	Severe aphid and pod borer infestation, indiscriminate use of plant protection chemicals	IPM and IDM and micro nutrient management
4	Malur	Nelahalli	1 year	Groundnut,Redgram, ragi, avare, tomato,cabbage Capcicum, Sericulture	Local varieties, lack of awareness on bio fertilizers and micronutrients application	Yield optimization through improved varieties
5	Kolar	Parshvaganahalli	2 years	Mango, avare, redgram, ragi, tomato,sericulture, capsicum, pole beans	Inadequate water conservation methods and micro nutrients application, low soil fertility, Improper management of pest and diseases	Water and soil conservation & INM practices in major fruits and vegetables
6	Mulabagilu	Ganjikunte	1 year	Ragi, avare,Kodo Millet,tomato redgram	Bronzing in leaves and fruits and low yield	Water and nutrient management in Horticulture crops
7	Malur	Seethahalli	1 year	Tomato,potato, polebeans, capsicum, ragi,avare	Haulm development at cost of tuber, late blight, mite and defoliator problem	INM and IPDM practices

8	Malur	Kshetrenahalli	1 year	Tomato, Potato, Marigold, cucumber,Chilli, ragi, avare, mango	Injudicious use of fertilizers and micro nutrient management	Nutrient management in Horticulture crops
9	Malur	Bannahalli	1 year	Tomato, potato, cucumber, capsicum,Mango, redgram,ragi, avare, sericulture, dairy	Severe powdery mildew and anthracnose disease incidence and fruit fly menace	IPM and IDM and micro nutrient management in horti. crops
10	Bangarpet	Venugopalapura	1 year	Sericulture, tomato, rose marigold, beans ragi, avare,dairy	Scarcity of water and low leaf yield	Water and nutrient management in tree mulberry and quality cocoon production
11	Kolar	Bayappanahalli	1 year	Redgram,Ragi, avare, tomato,beans, Sericulture, Marigold	Lack of awareness on use of bio fertilizer, micronutrients & silkworm growth promoters and Injudicious use of chemical fertilizers	Integrated crop management
12	Kolar	Parshvaganahalli	2 year	Mango, avare, redgram, ragi, tomato,sericulture, capsicum, pole beans	Lack of awareness on improved variety, more disease incidence and low leaf yield	Yield optimization
13	Kolar	Nadupalli	1 year	Mulberry, Ragi, Redgram, tomato, Fieldbean, Maize, Dairy	Labour scarcity, laborious, low price in cocoon market	Small scale mechanization
14	Kolar	Rampura	1 year	Mango, tomato, tamarind, sericulture, ragi, dairy, avare	Use of carcinogenic ripening agents, uneven and delay in ripening , low price realization and health hazards	
15	Kolar	Vemgal	1 year	Sericulture, Ragi, tomato, capsicum, avare, ragi	Lack of knowledge on use of grainage cut cocoons, value addition ,processing, packaging, labeling and branding (EDP)	Income generating activities for farm women

16	Srinivasapur	Gundammanatha	1 year	Mango, sericulture, tomato, field bean, ragi	Low income realization due to lack of knowledge on value addition processing, packaging, labeling and branding (EDP)	Income generating activities for farm women
17	Mulabagilu	Mindahalli	2 years	Cabbage, tomato, sweet corn, sericulture, avare	Severe incidence of DBM & indiscriminate use of pesticides	IPM and IDM and micro nutrient management in horti. crops
18	Malur	Kummanahalli	1 year	Cucumber, tomato, beans, cauliflower, potato, ragi, avare	Severe incidence of downy mildew disease	IPM and IDM and micro nutrient management in horti. crops
19	Kolar	Gaddekannuru	1 year	Cabbage, cauliflower, tomato, potato, polebeans	Diamond back moth (DBM) menace	IPM and IDM and micro nutrient management in horti. crops
20	Kolar	Kalluru	1 Year	Papaya, tomato, marigold, potato, ragi, redgram avare	Malformed fruits, micro nutrient deficiency, poor fruit set, low yield and poor quality	IPM and IDM and micro nutrient management in horti. crops
21	Kolar	Parshvaganahalli	2 years	Mango, sericulture, tomato, ragi, avare, potato	Lack of information on better utilization of inter row space in tree mulberry, non availability of proper technology	
22	Malur	Jodipura	1 year	Redgram avare, horse gram ragi, tomato, potato	Low yields and traditional varieties	Yield optimization

2.9 Priority thrust areas

Sl. No	Thrust area
1	Yield optimization through improved varieties
2	IPM and IDM and micro nutrient management in horti. crops
3	Water and soil conservation & INM practices in major fruits and vegetables
4	Water and nutrient management in tree mulberry and quality cocoon production
5	Integrated crop management
6	Value addition in minor millets and fruits
7	Water and nutrient management in Horticulture crops
8	Income generating activities for farm women

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
6	6	18	18	16	14	172	158

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
50	53	1360	3888	606	1060	7345	26225

Seed Production (Q)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
5 kg	1.4 kg	2000	--

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg) (Mango special)	
7		8	
Target	Achievement	Target	Achievement
--	--	1000	1786

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 (farmer)	Number of Training (Youths)	Number of Training (extension personnel)	Extensi on activiti es (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products		
													No.	Kg	
1		Horsegram	Traditional varieties and Low yield	Assessment of suitable horsegram varieties for higher productivity	-						45 kg				
2		Cauliflower	Severe Diamond back moth (DBM) menace and development of resistance	Assessment on Management of DBM in Cauliflower							Mustard= 1 kg				
3		cucumber	Severe incidence of downy mildew disease	Assessment on Management strategies for Downey mildew in Cucumber										Tricho derma	3 kg
4		Papaya	Malformed fruits, micro nutrient deficiency, poor fruit set, low yield and poor quality	Micro-nutrient management in Papaya											
5		Cabbage	Severe infestation of DBM	Evaluation of various pest management practices in cabbage							Mustard = 3 kg				
6		Mulberry	Lack of information on better utilization of in-between space, non availability of proper technology	Evaluation of suitable intercrops in tree mulberry for additional income							G.Nut pods= 60 kg Ragi = 10 kg Field bean= 10 kg				

7		Ragi			Introduction of medium Ragi variety, ML-365 for drought mitigation and delayed sowings	1			1	ML-365=150 kg			Azospirillum	12 kg
8		Groundnut			Introduction of new variety GKVK-5 in groundnut for varietal replacement	1			1	GKVK-5=700 kg			Rhizobium PSB	4 kg 4 kg
9		Redgram			Integrated crop management in Red gram	4				BRG-1=250 kg			Rhizobium PSB Tichodermma	10 kg 10 kg 3 kg
10		Fieldbean			Integrated pest management in Field bean	1								
11		Guava			Management of bronzing in guava									
12		Tomato			Nutrient management in tomato through fertigation	1								
13		Potato			Integrated crop management in Potato	1								
14		Cucumber			Integrated pest & disease management in cucumber									
15		Sericulture			Demonstration of tree mulberry for rainfed sericulture	1							Azospirillum PSB	80 kg 10 kg

16	Sericulture				Integrated nutrient management in mulberry & Use of Silkworm growth enhancer for higher cocoon yield	2			1	Sunhemp seeds=80 kg			Azospirillum PSB	80 kg 100 kg
17	Sericulture				Introduction of Improved variety of Mulberry G-4 for yield maximization					600 saplings			Azospirillum PSB	80 kg 100 kg
18	Sericulture				Demonstration of cocoon deflosser for increasing efficiency and reducing drudgery of farm women				1					
19	Home science				Low cost plastic ripening chamber for ripening of mango	1			1					

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 (Field day)
1	2	3	4	5	6	7	8
1	Assessment of suitable horse gram varieties for higher productivity	CRIDA, Hyderabad, TNAU, Coimbatore	Horse gram	3			
2	Assessment on Management of DBM in Cauliflower	IIHR (B), IIVR, Varanasi	Cauliflower	3			
3	Assessment on Management strategies for Downey mildew in Cucumber	IIHR (B) IIVR, Varanasi	Cucumber	3			
4	Micro-nutrient management in Papaya	IIHR, Bangalore TNAU, Coimbatore NDUAT, Faizabad	Papaya	3			
5	Evaluation of various pest management practices in cabbage	IIHR, Bangalore Reliance Polymers	Cabbage	3			
6	Evaluation of suitable intercrops in tree mulberry for additional income	UAS (B), RSRS, Chamarajanagara	Sericulture	3			

7	Introduction of medium Ragi variety, ML-365 for drought mitigation and delayed sowings	UAS(B)	Ragi		20	1	1
8	Introduction of new variety GKVK-5 in groundnut for varietal replacement	UAS (B)	Groundnut		20	1	1
9	Integrated crop management in Red gram	UAS(B)	Redgram		50	4	
10	Integrated pest management in Field bean	UAS (B)	Fieldbean		5		
11	Management of bronzing in guava	UHS (B)	Guava		3		
12	Nutrient management in tomato through fertigation	IIHR, Bangaluru	Tomato		5		
13	Integrated crop management in Potato	UHS (B)	Potato		9	1	
14	Integrated pest & disease management in cucumber	IIHR, Bangalore	cucumber		5		
15	Water conservation, nutrient and pest and disease in Mango	UAS (B)	Mango		10	1	
16	Demonstration of tree mulberry for rainfed sericulture	CSRTI, Mysore	Sericulture		10		
17	Integrated nutrient management in mulberry & Use of Silkworm growth enhancer for higher cocoon yield	CSRTI, Mysore	Sericulture		10	2	1
18	Demonstration of cocoon deflosser for increasing efficiency and reducing drudgery of farm women	CSRTI, Mysore	Sericulture		5		1
19	Introduction of Improved variety of Mulberry G-4 for yield maximization	CSRTI, Mysore	Sericulture		5		
20	Low cost plastic ripening chamber for ripening of mango	IIHR(B)	Home science		1		1
21	Entrepreneurship development through Cocoon Biocraft for SHG women (EDP-1)	UAS (B)	Sericulture			1	
22	Entrepreneur development of women SHG for branding & market for processed protein enriched spicy Mango bar(EDP -2)	TNAU, Coimbatore	Home science			1	

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
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
17	01	0	0	126	9	23	0	1830	1073	616	369	15497	5132	4437	1159

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						

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	Papaya	Micro-nutrient management in Papaya	03	03	0.8
Varietal Evaluation	Horse gram	Assessment of suitable horse gram varieties for higher productivity	03	03	1.20
Integrated Pest Management	Cabbage	Evaluation of various pest management practices in cabbage	03	03	0.6
	Cauliflower	Assessment on Management of DBM in Cauliflower	03	03	0.6
Integrated Crop Management					
Integrated Disease Management	Cucumber	Assessment on Management strategies for Downey mildew in Cucumber	03	03	0.6
Small Scale Income Generation					

Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System	Sericulture	Evaluation of suitable intercrops in tree mulberry for additional income	03	03	1.20
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			18	18	5.0

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					
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	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
Horse gram	Rainfed	Traditional varieties and Low yield	Assessment of suitable horsegram varieties for higher productivity	03	TO1 (Farmer practice) –PHG-9	UAS, Bengaluru	8.23	q/ha	15.22	5233.33	1.17	
					TO2- CRIDA – 18	CRIDA, Hyderabad	9.67	q/ha	18.56	9366.67	1.29	
					TO3- PAIYUR – 2	TNAU, Coimbatore	9.00	q/ha	16.89	7025.00	1.22	
Cauliflower	Irrigated	Severe Diamond back moth (DBM) menace and development of resistance	Assessment on Management of DBM in Cauliflower	03	TO1: Flubendiamide (0.05%), Emamectin benzoate (0.05%), Spinosad (0.15)%, Fipronil (0.15)%, Rynaxypyr (0.025%), Novaluron (0.15%), Chlorofenapyr (0.1%),	Farmers Practice	30.17	t/ha	2.76	41233.3	1.24	

					Chloropyriphos (0.2%), Deltamethrin (0.15%), Dichlorvos (0.2%), Lambdacylothrln (0.1%), Thiodicarb (0.2%) – Farmers' Practice							
					TO2: Mustard (trap crop) Spraying of Neem Soap (10g/l) Spraying of Bt formulation (0.1%) Novaluron (0.075%) or Indaxacarb (0.05%) or Ema. Benzoate (0.05%) – IIHR, B	IIHR (B)	32.83	t/ha	1.98	59400.00	1.35	
					TO3: Mustard (trap crop) Installation of WOTA-T Yellow Sticky traps Neem /pongamia Soap (5g/l) Emamectin benzoate 5SG (0.05%), Chlorfenapyr 10SC (0.1%), Spinosad 45 SC (0.15%), - IIHR, Varanasi	IIVR, Varanasi	40.83	t/ha	0.66	114400.0	1.67	
cucumber	Irrigated	Severe incidence of downy mildew disease	Assessment on Management strategies for Downey mildew in Cucumber	3	TO1:CoC (0.3%), Mancozeb (0.2%), Cymoxanil+ Mancozeb (0.3%), Metalaxyl + Mancozeb (0.2%), Dimethomorph (0.1%) + Captan (0.2%) – Farmers' Practice	Farmers' Practice	23.80	t/ha	26.79	82920.0	1.94	
					TO2: Seed treatment with Thiram (2g/kg seeds) Spray of Mancozeb (0.2%) & Cymoxanil+Mancozeb (0.2%) – IIHR (B)	IIHR (B)	27.30	t/ha	21.11	106235.00	2.18	
					TO3: Seed treatment with Metalaxyl (2g/kg seeds) Trichoderma harzanum enriched Farm Yard Manure (@ 1 kg / 100 kg FYM) application Prophylactic Spray with Mancozeb (0.25%) followed by Spraying of Metalaxyl+ Mancozeb (0.25%) and Dimethomorph	IIVR, Varanasi	31.50	t/ha	11.09	134900.00	2.47	

					(0.1%)+ Mancozeb (0.2%) - IIVR, Varanasi							
Papaya	Irrigated	Malformed fruits, micro nutrient deficiency, poor fruit set, low yield and poor quality	Micro-nutrient management in Papaya	3	TO1: Soil application of Borax@10 g per plant	Farmers Practice	Trial under Progress					
					TO2: At planting apply Borax 20-25g per plant - foliar spray at 25% flowering. At flowering, spray Solubor (20% B) followed by boric acid (17% B).	IIHR, Bangalore						
					TO3: Spray ZnSO4 0.5% + H2BO3 0.1% during 4 th and 8 th month to increase growth and yield characters	TNAU, Coimbatore						
					TO4: Foliar spray of Borax 0.1% + MnSo4 0.25%+CuSO4 0.25% at 2 and 3 months after transplanting	NDUAT, Faizabad						
Cabbage	Irrigated	DBM menace and indiscriminate use of pesticides	Evaluation of various pest management practices in cabbage against DBM	3	TO1: Farmers practice	FP	51.50	t/ha	7.60	2850	1.01	
					TO2: Mustard trap crop, neem soap spray (10 g/l), spray with novuluron (0.075), Indaxacarb(0.05%), emamectin benzoate (0.05%)	IIHR, Bangalore	53.30	t/ha	4.40	13650	1.09	
					TO3: Spray with spinosad @ 0.2 ml/l -Cover the crop with polypropylene cloth 15 days after transplanting	Reliance polymer	56.20	t/ha	1.10	9650	1.06	
Mulberry	Rainfed	Lack of information on better utilization of in-between space, non availability of proper technology	Evaluation of suitable intercrops in tree mulberry for additional income	3	TO1: Farmer practice : No intercrop	-	68.96	q/ha	-	1,04,537	5.18	
					TO2: Tree Mulberry + Ragi	UAS (B)	60.70	q/ha	17.30	1,20,667	3.57	
					TO3: Tree Mulberry + Groundnut	RSRS Chamaraja nagar	66.97	q/ha	13.06	1,29,742	3.40	
					TO4 Tree Mulberry + Field bean	ITK	65.82	q/ha	36.86	1,75,106	5.26	

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

1. Title of Technology Assessed
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 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

4.D.2. Details of Technologies refined:Nil

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

5.A. Summary of FLDs implemented

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/Marginal	Others
1	Oilseeds	Rainfed	Kharif	Groundnut	GKVK-5	-	Variety INM	Introduction of new variety GKVK-5 in groundnut for varietal replacement	10	8	6	14	0	0
2	Pulses	Rainfed	Kharif	Redgram	BRG-1	-	ICM	Integrated crop management in Red gram	20	20	9	41	0	0
3		Rainfed	Kharif	Field bean	Local	-	IPM	Integrated pest management in Field bean	1	1	2	3	0	0
	Cereals													
4	Millets	Rainfed	Kharif	Ragi	ML-365	-	ICM	Introduction of medium Ragi variety, ML-365 for drought mitigation and delayed sowings	20	20	-	20	0	0
5	Vegetables	Irrigated	Rabi	Cucumber	Chitra	-	IPDM	Integrated pest & disease management in cucumber	1	1	-	5	0	0
6		Irrigated	Kharif	Tomato	-	Abhinava	Nutrient management	Nutrient management in tomato through fertigation	1	1	-	5	0	0
7		Irrigated	Rabi	Potato	Kufri Jyothi	-	ICM	Integrated crop management in Potato	4.0	3.6	-	9	0	0
	Flowers													
	Ornamental													
8	Fruit	Rainfed	Rabi	Guava	Totapuri	-	Micro nutrient management	Management of bronzing in guava	3	3	-	3	0	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												
	Grounnut	Rainfed	Kharif, 2017-18	Grounnut	GKVK-5	-	Variety and INM	Introduction of new variety GKVK-5 in groundnut for varietal replacement	Kharif, 2017-18				
	Pulses	Rainfed	Kharif 2017	Redgram	BRG-1	-	ICM	Integrated crop management in Red gram	Kharif 2017	393.02	138.72	356.97	Ragi
		Rainfed	Rabi 2017	Field bean	-	H-4	IPM	Integrated pest management in Field bean	Rabi 2017	249.62	34.35	246.78	Ragi
	Cereals												
	Millets												
	Ragi	Rainfed	Kharif 2017-18	Ragi	ML-365	-	Varie ty	Introduction of medium Ragi variety, ML-365 for drought mitigation and delayed sowings	Kharif 2017	248.09	84.59	270.19	Redgram
	Vegetables												
		Irrigated	Kharif 2017	Tomato	-	Abhi nav	INM	Nutrient management in tomato through fertigation	Kharif 2017	298.54	97.73	278.28	Potato
		Irrigated	Rabi 2017	Potato	Kufri Jyothi	-	ICM	Integrated crop management in Potato	Rabi 2017	294.08	210.57	365.47	Tomato
		Irrigated	Rabi 2017	Cucumber	Chitra	-	IPD M	Integrated pest & disease management in cucumber	Rabi 2017	124.18	78.59	369.51	Pole Beans
	Flowers												
	Ornamental												
	Fruit												
		Rainfed	Kharif 2017	Mango	Totapuri	--	ICM	Soil,water conservation,micronutrient mgt pest and disease mgt.	Kharif 2017	272.83	78.31	228.34	Mango

		Irrigated	Rabi 2017	Guava	Al.Safed	-	NM	Management of bronzing in guava	Rabi 2017	181.89	80.92	254.96	Guava
		Rainfed	Summer 2017	Mango	Benishan/Dasherri	-		Eco friendly and low cost ripening	Summer 2017				Mango
	Spices and condiments												
	Commercial												
	Medicinal and aromatic												
	Fodder												
	Plantation												
	Fibre												
	Mulberry	Irrigated	Kharif 2017-18	Mulberry	V1	-	INM	Integrated nutrient management in mulberry & Use of Silkworm growth enhancer for higher cocoon yield	Kharif 2017-18	283.49	109.57	826.7	Mulberry
	Mulberry	Irrigated	Kharif 2017-18	Mulberry	V1	-	Water mgt	Demonstration of tree mulberry for rainfed sericulture	Kharif 2017-18	288.51	91.51	353.20	Mulberry
	Mulberry	Irrigated	Kharif 2017-18	Mulberry	G-4	-	Varietal	Introduction of Improved variety of Mulberry G-4 for yield maximization	Kharif 2017-18	257.50	131.62	195.95	Mulberry

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																				
Groundnut	Introduction of new variety GKVK-5 in groundnut for varietal replacement	GKVK-5	-	Irrigated	20	10	21.0	6.13	15.81	11.88	33.07	60851.88	91846.25	30994.38	1.51	49526.88	59906.5	10379.63	1.22	
Pulses																				
Redgram	Integrated crop management in Red gram	BRG-1	-	Rainfed	50	20	10.6	7.2	9.10	7.68	18.48	23774	40388	16614	1.70	23406	34088	10682	1.46	
Field bean	Integrated pest management in Field bean	Local	-	Rainfed	05	01	6.83	6.17	6.49	4.98	30.27	15055.0	42509.50	27454.50	2.83	14375.0	32632.10	18257.10	2.27	
Cereals																				
Millets																				
Ragi	Introduction of medium Ragi variety, ML-365 for drought mitigation and delayed sowings	ML-365	-	Rainfed	20	8	40.0	18.75	25.59	19.94	28.34	22108	63968	41860	2.89	19108	49860	30751	2.60	
Vegetables																				
Tomato	Nutrient management in tomato through fertigation		Abhinav	Irrigated	05	1	662.0	580.0	611.8	539.3	13.44	475132	1468320	993188	3.090	468089.6	1294320	826230.4	2.76	

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check
Ragi		
Plant Height (cm)	90.19	81.40
Tillers/plant (No)	7.14	4.78
Earheads/plant (No)	8.26	6.30
Days to maturity	115	102
Defoliators/plant	0.54	2.63
Groundnut		
Plant height(cm)	54.97	59.75
Pods/plant (No)	71.32	29.68
Pod yield/plant (g)	131.87	50.41
Haulm yield(t/ha)	1122.08	368.2
Tikka incidence(%PDI)	21.22	49.89
Redgram		
Pods/plant(No)	211.66	154.48
Pod borer (%)	3.84	12.26
Leaf webber(No/pl)	3.42	8.54
Sterility mosaic(%)	2.32	9.86
Field bean		
Pod borer (%)	5.92	15.13
Aphids/ 5 cm shoot(No)	12.60	36.88
Branches/plant (No)	8.08	7.84
Numbers of plant/plant	87.88	77.08
Tomato		
TSS(Brix)	5.42	4.76
Fruit firmness(lb)	5.48	4.58
Shelf life (days)	21.80	17.60
Guava		
Bronzing (% recovery)	6.85	33.35
Mango		
Hoppers incidence(No/inflor)	8.40	12.54
Powdery mildew(%PDI)	6.70	15.10
Potato		
Fresh plant weight(g)	179.28	190.81
Tubers/plant(No)	9.64	7.75
Defoliators/plant(No)	0.58	1.36
Mites/leaf (No)	1.31	3.18
Late blight(PDI)	4.22	17.28
Cucumber		
Downey mildew (PDI)	20.30	38.22
Powdery mildew(PDI)	21.48	41.33
Leaf miners/leaf (No)	4.70	8.60

Maize (Fodder)																	
Sorghum (Fodder)																	
Others Mulberry																	
Total																	

H-High L-Low, A-Average

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

EDP 1. Entrepreneurship development through cocoon bio craft for SHG Women

Items	Unit cost(Rs)	Unit selling price(Rs)	Total production	Profit /unit (Rs)	Net Profit (Rs)
Garland-single	75	100	60	25	1500
Garland-double	125	125	30	25	750
Silkball garland	75	150	30	50	1500
				Total earning (Rs.)	3750

EDP 2. Preparation of Protein Enriched Mango spicy Bar

Items	Unit cost(Rs/kg)	Unit selling price(Rs)	Total production	Profit /unit (Rs)	Net Profit (Rs)
Mango spicy bar	90	110	8.5 kg	20	170

Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (Capacity building for input dealers)	1	37	0	37	3	0	3	40	0	40
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Farmers to farmers training)	6	150	3	153	24	0	24	174	3	177
TOTAL	16	403	90	493	96	26	122	504	111	615

Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (Bee Keeping)	1	0	35	35	0	15	15	0	50	50
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	29	1147	880	2027	455	316	771	1602	1196	2798

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										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture	2	60	0	60	10	0	10	70	0	70
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										
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)										
TOTAL	2	60	0	60	10	0	10	70	0	70

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	4	220	75	295	55	15	70	275	90	365
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										
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)										
TOTAL	4	220	75	295	55	15	70	275	90	365

Household food security										
Any other (pl.specify)										
Total										

7.G. Sponsored training programmes conducted

S.No	Area of training	No. of Courses	No. of Participants										
			General			SC/ST			Grand Total				
			Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	Crop production and management												
1.a.	Increasing production and productivity of crops												
1.b.	Commercial production of vegetables												
2	Production and value addition												
2.a.	Fruit Plants												
2.b.	Ornamental plants												
2.c.	Spices crops												
3.	Soil health and fertility management												
4	Production of Inputs at site												
5	Methods of protective cultivation												
6	Others (pl.specify)												
7	Post harvest technology and value addition												
7.a.	Processing and value addition												
7.b.	Others (pl.specify)												
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)												
11.	Home Science												
11.a.	Household nutritional security												
11.b.	Economic empowerment of women												
11.c.	Drudgery reduction of women												
11.d.	Others (pl.specify)												
12	Agricultural Extension												
12.a.	CapacityBuilding and Group Dynamics												
12.b.	Others (pl.specify)												
	Total												

Details of sponsoring agencies involved

- 1.
- 2.
- 3.

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

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.	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	1	0	13	13	0	7	7	0	20	20	
2.b.	Others (pl.specify)											
3.	Livestock and fisheries											
3.a.	Dairy farming											
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											
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 (Bio crafts preparation)	1	0	15	15	0	5	5	0	20	20	
4.g.	Mushroom cultivation											
4.h.	Nursery, grafting etc.											
4.i.	Tailoring, stitching, embroidery, dying etc.											
4.j.	Agril. para-workers, para-vet training											
4.k.	Others (pl.specify)											
5	Agricultural Extension											
5.a.	Capacity building and group dynamics											
5.b.	Others (pl.specify)											
	Grand Total	2	0	28	28	0	12	12	0	40	40	

PART VIII – EXTENSION ACTIVITIES**Extension Programmes (including extension activities undertaken in FLD programmes)**

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	5	107	26	133	13	2	15	30	8	38
Kisan Mela	1	4000	2000	6000	500	200	700	200	100	300
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Exhibition	9	1200	700	1900	150	50	200	52	22	74
Film Show	7	600	50	650	70	10	80	41	10	51
Method Demonstrations	20	456	26	482	92	20	112	20	7	27
Farmers Seminar	17	1412	300	1712	243	96	339	1000	104	1104
Workshop										
Group meetings	28	450	50	500	100	21	121	200	63	263
Lectures delivered as resource persons	65	4475	1403	5878	2197	575	2772	1000	191	1191
Newspaper coverage	21	-	-	-	-	-	-	-	-	-
Radio talks	5	-	-	-	-	-	-	-	-	-
TV talks	10	-	-	-	-	-	-	-	-	-
Popular articles	10	-	-	-	-	-	-	-	-	-
Extension Literature	5	100	50	150	50	5	55	0	0	0
Advisory Services	306	200	50	250	40	10	50	20	6	26
Scientific visit to farmers field	254	950	70	1020	650	91	741	100	54	154
Farmers visit to KVK	256	200	10	210	40	6	46	0	0	0
Diagnostic visits	37	110	8	118	60	3	63	55	10	65
Exposure visits	5	147	9	156	44	0	44	2	0	2
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp	2 Animals treated 610	92	15	107	36	5	41	8	0	8
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings										
Celebration of important days (specify)	9	921	380	1301	188	70	258	30	5	35
Any Other (Specify)										
Total	1060	15420	5147	20567	4473	1164	5637	2758	580	3338

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

Crop category	Name of the crop	Name of the Variety	Name of the Hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables	Drumstick	Bhagya		1.4 kgs	3500/-	3
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total						

9.B. Production of planting materials by the KVKs: Nil

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total						

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	-	-	-	-
Bio-pesticide	-	-	-	-
Bio-fungicide	-	-	-	-
Bio Agents	-	-	-	-
Others – Mango Special	Mango Special	1786	267900	132
Total	Mango Special	1786	267900	132

9.D. Production of livestock materials: Nil

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)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

10. A. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters	KVK News Letter	All KVK Staff	02
Technical bulletins			
Popular articles	Role of Trichogramma chilonis on management of leaf roller and bihar hairy caterpillar in mulberry	Shashidhar,K.R. & K. Thulasiram	
	Management of bark eating caterpillar in tree mulberry	Shashidhar,K.R. & K. Thulasiram	
	Management of May-June beetles in mulberry	Shashidhar,K.R., Nagaraja,KS, Noorulla Haveri	
	Management of pests through biological methods in sericulture	Shashidhar,K.R. K.Thulasiram Nagaraja K.S. Noorulla Haveri	
	Fig cultivation	Nagaraj K S, Kashinath Patil and Shashidhar K R	
	Trichoderma - A biopesticide in mulberry disease management	Shashidhar, K.R. Noorulla Haveri & K. Thulasiram	
	Agro forestry component in Mulberry field for additional income	Dr.Shashidhar K.R, Umesha Naik, Dr.Nagaraj K.S	
	Integrated management of uzifly in silkworm rearing	Dr. K.R. shashidhar, K.Thulasiram	
	Role of secondary nutrients in growth and development of mulberry	Dr. Shashidhar K.R., Dr. Nagaraj K.S. Dr. Noorulla Haveri,	
	Tree mulberry cultivation a boon for dryland sericulture	Dr.Shashidhar K.R, K.Thulasiram	
Extension literature	Pest and disease management in tree mulberry	Dr.Shashidhar K.R, K.Thulasiram	
	Integrated pest and disease management in protected cultivation	K.Thulasiram Dr.Noorulla Haveri Dr.Shashidhar K.R,	
Others (Book)	Improved production technology in cashew	K.Thulasiram Dr. Nagaraj Dr. Noorulla Haveri,	

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

This will be considered only with suitable photos for further reporting/reference.

The Broad outline for the case study may be

Title

Background

Interventions

Process

Technology

Impact

Horizontal Spread

Economic gains

Employment Generation

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

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

10.F. Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women: Discussion with extension functionaries, farmers
- Rural Youth: Discussions
- Inservice personnel: Discussions

10.G. Field activities

- i. Number of villages adopted: 1
- ii. No. of farm families selected : 25
- iii. No. of survey/PRA conducted: 5

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Soil Science lab of College of Horticulture is being utilized

1. Year of establishment : 2010
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1611	1611	1155	322200
Water Samples	993	993	641	198600
Plant samples	--	--	--	--
Manure samples	--	--	--	--
Others (specify)	--	--	--	--
Total	2604	2604	1796	520800

Details of samples analyzed during the 2017-18:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	664	664	447	132800
Water Samples	447	447	447	89400
Plant samples	--	--	--	--
Manure samples	--	--	--	--
Others (specify)	--	--	--	--
Total	1111	1111	894	222200

Details of soil health cards issued during the 2017-18:

Date(s)	Farmers participated	No. of Samples analyzed	Soil health cards issued	No. of Villages	Public representatives participated	
					MLA/Minister	Other Dignitaries/ Chief guests
17-18	664	664	664	447	-	Director, ATARI, JDA,DDH etc.

10.I. Technology Week celebration during 2017-18 Yes/No, If Yes :No

Period of observing Technology Week: From _____ to _____

Total number of farmers visited _____ :

Total number of agencies involved _____ :

Number of demonstrations visited by the farmers within KVK campus _____ :

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-		
Lectures delivered	-	-	
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)			
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			

PART XI. IMPACT

11.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)

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

11.B. Cases of large scale adoption

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

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
KSDA	Training programmes, diagnostic field visits, surveys, meetings etc
KSDH	Training programmes, diagnostic field visits, surveys, meetings etc
Veterinary & Animal husbandary	Training programmes, diagnostic field visits, surveys, meetings etc
Sericulture	Training programmes, diagnostic field visits, surveys, meetings etc
Karnataka Milk Federation	Training programmes, diagnostic field visits, surveys, meetings etc
Dept. of Fisheries	Meetings etc

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

12.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.)
Enhancing farmers income and welfare	2016-17	KAPC	20 lakhs

12.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 scientists have actively participated in conducting PRAs, group discussions and meetings while preparing SREP.

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				
02	Research projects				
03	Training programmes				
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela				

	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

12.D. Give details of programmes implemented under National Horticultural Mission: Nil

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

12.E. Nature of linkage with National Fisheries Development Board : Nil

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

12.F. Details of linkage with RKVY : Nil

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

12. GKisan 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 2017	Text	3	0	0	0	0	0	3	31872
May	Text	3	0	0	0	0	0	3	31873
June	Text	8	0	0	0	0	0	8	84977
July	Text	6	0	0	0	1	0	7	75847
August	Text	13	0	0	0	2	0	15	159379
September	Text	8	0	0	0	2	0	10	98582
October	Text	6	0	0	0	0	0	6	63765
November	Text	8	0	0	0	2	0	10	107712
December	Text	8	0	0	0	1	0	9	98616
January,2018	Text	10	0	0	0	4	0	14	130467
February	Text	6	0	0	0	1	0	7	83985
March	Text	4	0	0	0	2	0	6	71896
Total		83	0	0	0	15	0	98	1038971

13.E. Utilization of hostel facilities: Nil

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2017			
May			
June			
July			
August			
September			
October			
November			
December			
January 2018			
February			
March			

13.F. Database management

S.No	Database target	Database created

13.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 irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		

PART XIV - FINANCIAL PERFORMANCE**14.A. 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	SBI	Bagalkot	17867	Current a/c	30611531173	587002104	SBIN0017867
With KVK	SBI	kolar	6029	Current a/c	34004434216	563002101	SBIN006029
Revolving Fund	SBI	kolar	6029	Current a/c	34004259049	563002101	SBIN006029

14.B. Utilization of KVK funds during the year 2017-2018(Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	78.86	78.86	7799889
2	Traveling allowances	0.80	0.80	25331
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.10	2.10	202187
B	POL, repair of vehicles, tractor and equipments	3.00	3.00	242586
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.00	1.00	82235
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.60	0.60	35163
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.50	2.50	174881
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.40	0.40	32132
	Training of extension Activities+World soil day	1.10	1.10	89647
G	Training of extension functionaries	0.15	0.15	0
	IFS	0.25	0.25	15322
	FFS	0.30	0.30	23204
	EDP	0.15	0.15	15664
H	Maintenance of buildings	-	-	-
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	0.05	0.05	2625
	Soil & water testing & issue of soil health cards	0.25	0.25	23246
	Farmers conclave	0.85	0.85	0
TOTAL (A)				
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			-
TOTAL (B)				-
C. REVOLVING FUND		92.36	92.36	8764108
GRAND TOTAL (A+B+C)				

14.C. Status of revolving fund (Rs. in lakh) for the 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 2014 to March 2015	100000	134920	112130	122790
April 2015 to March 2016	122790	329919	145320	307389
April 2016 to March 2017	307389	550470	118387	739472
April 2017 to March 2018	739472	508525	268085	979912

15. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Noorulla Haveri	Scientist(Plant protection)	Innovative approaches in Integrated pest & disease management in Horticultural crops	UAS, Dharwad	8.12.2017 to 28.12.2017
Dr. Nagaraj K.S.	Scientist(Horticulture)	Attended 3 days "orientation training of KVK Scientists"	ICAR-JSS KVK,Suttur, Mysore, Karnataka	17.8.2017 to 19.8.2017
		Attended 7 days Model training course on Impact of climate change and its management in Horticulture crops organized during 6 th to 13 th March 2018 at Director of Extension, UHS, Bagalkot	UHS, Bagalkot	6.3.2018 to 13.3.2017

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