Annual Progress Report 2017-18

(FOR THE PERIOD FROM APRIL 2017 TO MARCH 2018)

Submitted to:

Director
Indian Council of Agricultural Research
Agricultural Technology Application Research Institute (ATARI)
MRS, HA Farm Post, Hebbal
BANGALURU – 560 024

Submitted by:

ICAR-TaralabaluKrishiVigyan Kendra, Davanagere
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Davanagere - 577 004
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Website: www.taralabalukvk.com

PART I - GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR- Krishi Vigyan Kendra Kadalivana, LIC Colony Layout, B.I.E.T. Road, Davanagere – 577 004 Davanagere-Dist.	08192 – 263462	08192 – 297142	kvk.Davanagere@icar.gov.in	www.taralabalukvk.com

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Taralabalu Rural Development Foundation Sirigere – 577541 Chitradurga (Dist.)	08194 – 268829, 268842	08194 - 268847	kvk.Davanagere@icar.gov.in	**http://**www.taralabalu.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Devaraja T.N.	--	094498 – 56876	tngdevaraja@gmail.com

1.4. Year of sanction: 2004

1.5. Staff position as on 31 March 2018

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for SS&H, SMS and Prog. Asstt.)
1	2	3	4	5	6	7
1	Senior Scientist-Cum-Head	Dr. Devaraja T.N.	Senior Scientist-Cum-Head	M	Fisheries	Ph.D. (Aquatic Microbiology)
2	Subject Matter Specialist	Mr. Basavanagowda M.G	Subject Matter Specialist	M	Horticulture	M.Sc. (Hort.)
3	Subject Matter Specialist	Mr. Mallikarjuna B.O	Subject Matter Specialist	M	Agronomy	M.Sc. (Agri.)
4	Subject Matter Specialist	Dr. Jayadevappa G.K.	Subject Matter Specialist	M	Animal Science	M.V.Sc. (Animal Nutrition)
5	Subject Matter Specialist	Mr. Raghuraja J.	Subject Matter Specialist	M	Agricultural Extension	M.Sc. (Agri.)
6	Subject Matter Specialist	Mr. Prasanna Kumara N.	Subject Matter Specialist	M	Plant Protection (Pathology)	M.Sc. (Agri.)
7	Subject Matter Specialist	Mr. Sannagoudra H.M.	Subject Matter Specialist	M	Soil Science	M.Sc. (Agri.)
8	Programme Assistant (Lab Tech.)/T-4	Mr. Revanasiddappa G.B.P.	Programme Assistant (Lab Tech.)	M	Lab Technician	M.Sc. (Agri.)
9	Programme Assistant (Computer)/ T-4	Mr. Santhosh B.	Programme Assistant	M	Computer	B.Sc. (Computer Science)
10	Programme Assistant/ Farm Manager	Mr. Vijayakumar S.B.	Programme Assistant	M	Farm Manager	M.Sc. (Plant Breeding & genetics)
11	Assistant	Mr. Mallikarjuna S.Gudihindala	Assistant	M	Assistant	B.Com.
12	Stenographer	Mrs. Mamatha H. Melmalagi	Stenographer-III	F	Stenographer-III	B.Com. + Shorthand
13	Supporting staff	Mr. Shivakumara B.	Supporting staff	M	Office Attendant	S.S.L.C.
14	Supporting staff	Mr. Shivakumara S.E.	Supporting staff	M	Field Attendant	S.S.L.C.
15	Driver-Cum-Machanic	Mr. Marulasiddaiah N.M.	Driver-Cum-Machanic	M	Jeep Driver	BA
16	Driver-Cum-Machanic	Mr. Shivakumara S.	Driver-Cum-Machanic	M	Tractor Driver	S.S.L.C.

Name of the incumbent	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/Others)
3	8	9	10	11	12
Dr. Devaraja T.N.	37400-67000	49920/-	17-05-2005	Permanent	Others
Mr. Basavanagowda M.G.	15600-39100	24610/-	21-11-2006	Permanent	Others
Mr. Mallikarjuna B.O.	15600-39100	23700//-	09-01-2008	Permanent	Others
Dr. Jayadevappa G.K.	15600-39100	23700/-	29-01-2008	Permanent	Others
Mr. Raghuraja J.	15600-39100	22020/-	23-06-2008	Permanent	Others
Mr. Prasanna Kumara N.	15600-39100	21220/-	24-06-2008	Permanent	Others
Mr. Sannagoudra H.M.	15600-39100	18240/-	01-07-2013	Permanent	Others
Mr. Revanasiddappa G.B.P.	9300-34800	11470/-	11-04-2012	Permanent	Others
Mr. Santhosh B.	9300-34800	13450/-	05-09-2008	Permanent	Others
Mr. Vijayakumar S.B.	9300-34800	12930/-	23-06-2008	Permanent	Others
Mr. Mallikarjuna S.Gudihindala	9300-34800	17570/-	01-06-2005	Permanent	Others
Mrs. Mamatha H. Melmalagi	5200-20200	11950/-	27-06-2005	Permanent	Others
Mr. Shivakumara B.	5200-20200	8550/-	01-06-2005	Permanent	Others
Mr. Shivakumara S.E.	5200-20200	8550/-	01-06-2005	Permanent	Others
Mr. Marulasiddaiah N.M.	5200-20200	9370/-	01-06-2005	Permanent	Others
Mr. Shivakumara S.	5200-20200	9720/-	01-06-2005	Permanent	Others

1.6. Total land with KVK (in ha):15 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.75
2.	Under Demonstration Units	0.50
3.	Under Crops	7.25
4.	Orchard/Agro-forestry	5.0
5.	Others	0.5
		15

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.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	04.01.2008	550	29.37			Completed
2.	Farmers Hostel	ICAR	04.01.2008	300	18,82,000.00			Completed
3.	Staff Quarters	ICAR	04.01.2008	400	19,40,000.00			Completed
	1. SMS (Animal Science)							
	2 . SMS (Agri. Extension)							
	3. SMS (Soil Science)							
	4 Farm Manager							
	5. Office Assistant							
	6. Driver (Jeep)							
4.	Demonstration Units							
	1. Dairy with modern facilities	ICAR	04.01.2008	160	6,41,000.00			Completed
	2. Shade Home	DBT	29.03.2013	1000	2,10,000.00			Completed
	3. Azolla bulk production unit	RF	2010	3	3,000.00			Completed
	4. Azolla production unit	NICRA	28.03.2013	3.53	20,000.00			Completed
	5. Ornamental fish breeding unit	DBT	2010	700	1,49,955.00			Completed
	6. Fish polyculture pond with horti integration	DBT	2010	600				Completed

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
	7. Guava Scion Block	RF	November 2018	1,000	1,00,000/-			Completed
	8. Portable Carp hatchery	ICAR	31-03-2011	--	2,25,000-00			Completed
	9..Fodder demo units	RF	2010	4000	41,428.00			Completed
	10. Biogas unit	RF	2011	04	29920.00			Completed
	11. Fish cum paddy cultivation unit	RF	2011	421	13071.00			Completed
	12. Vermicomposting units	RF	2008	121	60000			Completed
	13 .Vermicomposting unit	DBT	2010	60	15000			Completed
5	Fencing	ICAR	31-03-2011	930 feet	11,00,000			Completed
6	Rain Water harvesting system	--	--	--	--	To be sanctioned	--	
7	Threshing floor	ICAR	31-03-2011		2,00,000-00			Completed
8	Farm godown	ICAR	--	--	--	To be sanctioned	--	
9	Bore wells (2 No.s)	ICAR	31-03-2011		3,00,000-00			Completed
10	Irrigation system	ICAR	31-03-2011		1,00,000-00			Completed
11	Borewell recharge unit	RF	01-06-2011		64,585-00			Completed
12	Plant Health Clinic	ICAR	01.04.2012		10,00,000.00			Completed
13	Orchards and agro forestry							Completed
	1. Mango	RF	2000	12000	53215.00			Completed
	2. Sapota orchard	RF	2010	4000	44775.00			Completed
	3. Hexagonal and penta planting of coconut garden, Germ plasm coconut	RF	2009	4000	9035.00			Completed
	4. Arecanut garden	RF	2007	8000	72228.00			Completed
	5.Tarmarind garden, Medicinal plants	RF	2000	2000	--			Completed
	6.Curry leaf garden	RF	2007	500	--			Completed
	7. Agro forestry with biofuel plants	RF	2000	24000	13166.00			Completed

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor and Trailer	2005	4,99,995-00	35984	Good
Power tiller Funded by FLD cotton	2008	99400-00		Good
Power Tiller	2010	131500-00		Good
Mahindra Bolero	2017	8,00,000-00	23206	
Hero Honda CD Deluxe	2006	39,298-00	71150	Good
Yamaha Alba	2009	48,309-00	55942	Good

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Mixer	2005	3,300/-	Good
Xerox Machine	2006	73,840/-	Good
Digital Camera	2006	19,900/-	Not in working condition
Over Head Projector	2006	19,935/-	Good
TV with DVD Player (Funded by SHIMUL)	2006	11,350/-	Good
Refrigerator (LG)	2007	10,000/-	Good
Deep Freezer + Stabilizer (Funded by ATMA)	2013	16,650/-	Good
Computer +LCD	2007	1,00,103/-	Good
Fax (4 in one)	2009	15,000/-	Good
Generator	2011	100000/-	Good
Sony Digital GPS Camera	2017	28,500/-	Good
Computer	2017	27,800/-	Good
UPS	2017	72,100/-	Good
Xerox Machine	2017	65,000/-	Good
LCD Projector	2017	32,100/-	Good
RO Water Purifier	2017	65,000/-	Good
Hard Disks (2 No.s)	2017	9,500/-	Good

1.8. Details of SAC meeting conducted during 2017-18

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
16-12-2017	Shri M.K. Renukarya, Representative of Chairman, TRDF, Sirigere (Chairman of the meeting). Dr. Sreenath Dixit, Director, ATARI, Bengaluru. Dr. R. Senthil Kumara, Representative of Director, IIHR, Bengaluru. Dr. T.H. Gowda, Director of Extension, UAHS, Shimoga. Dr. K. Manjappa, ADR, UAHS, Shivamogga. Sri V. Sadashiva, Joint Director of Agriculture, Davanagere. Shri. T.R. Vedamurthy, Deputy Director, Department of Horticulture, Davanagere Shri Raghavendra Prasad, Deputy Director, Sujala Water shed-III, Davangere.	• To produce pepper seedlings in Krishi Vigyan Kendra and supply to farmers. Panchami and Pournami varieties can be introduced. • To get vermicelli production unit FASSI registration and packing and branding. • Facilitate direct marketing by farmers through training/exposure visits. Individual farmer/farmer group should be motivated in line with Sri Onkarappa from S. Mallapura village. At least, 5 such cases by next SAC meeting. • To document spread of BRG-5 redgram variety in the district. Make an impact study by selecting 25 farmers out of 190 farmers who cultivated BRG-5 variety. • CSR activities support should be taken to spread Krishi Vigyan Kendra technologies. • Special activities need to be taken up by Krishi Vigyan Kendra to create awareness on soil analysis based fertilizers application to farmers. • To link Aadhar number to soil analysis report issued by Krishi Vigyan Kendra. • To organize an Farmer-Scientist interface to review the soil analysis reports data. • Create payment gateway in website to receive online payment.	On going	

	Shri. Manjunath N.B., Deputy Conservator of Forests (Social Forestry), Davanagere. Dr. Umesha D. Senior Assistant Director of Fisheries, Department of Fisheries, Davanagere. Smt. Veena M., Women and Child Development Welfare, Davanagere Ms. Shruthi B.S, and Ms. Rashmi T., Representative of District Information and Publicity officer, Davanagere. Shri. N.T. Yerriswamy., Lead Bank, Manager, Canara Bank, Davanagere.	• To put short technology videos in website and youtube. (< 3 minutes). • Establish chick hatchery in Krishi Vigyan Kendra. • To take up *Melia dubia* in Kadalivana farm and use them as fodder. • To develop market innovation book (success stories of innovative farmers on marketing).		
	Shri. Madhusudan, Programme Executive, AIR, Chitradurga. Shri. Venkataramanjaneya Swamy, Small Farmer, Salakatte, Harihara Taluk, Davanagere. Shri. Murugeshappa H.B., Big Farmer, Hedne, Harapanahalli Taluk, Davanagere. Smt. Yashoda G.C., Farm Woman, Rameshwara, Honnali Taluk, Davanagere.	**Group-II : To be addressed through action plan of KVK in the year 2018-19** • Animal Science activities need to be concentrated in Jagalur and Harapanahalli tq. • To take up FLDs and OFTs in ICM and IFS concept to help in doubling farmers income in the district. • To promote small ruminants and desi cows, both in KVK and with farmers.		
	Smt. Siddabasamma, Farm Woman, Haluvarthy, Davanagere Taluk, Davanagere. Dr. Devaraja T.N., Member Secretary, Senior Scientist-Cum-Head, ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere. **Special Invitees:** Sri K.P. Basavarajappa, Member, Taralabalu Rural Development Foundation, Sirigere. Shri. Hanumanthappa G., State President, Rajya Krishika Samaja, Davanagere.	**Group-III : To be addressed through convergence with Development Departments** • Increase AI activities for the help of dairy farmers may be at taluk level and increase the member of A I experts. • Adopt innovative methodologies to replicate SWTL, Animal Science, Vermicompost and other activities and consider out sourcing of nursery, AI, Grafting in way that Krishi Vigyan Kendra should be an incubation centre. • Seeds of Bheema Super variety in onion should be made available in the district (either in KVK or with Department/farmers) FPO's can be used for this purpose. • A team of 20-25 farmers can be sent for a training on protected cultivation with the help of Department of Horticulture.		

		• To submit proposal on 'Model nursery' to Department of Horticulture, Davanagere. • Spread the information on availability of forest species in forestry Department through KVK extension activities. • To create awareness on marketing and include APMC personnel in KVK programmes and SAC meeting.		
	ICAR- Taralabalu Krishi Vigyan Kendra Staff: Shri M.G Basavanagowda, SMS (Horticulture), KVK, Davanagere			
	Shri B.O Mallikarjuna, SMS (Agronomy), KVK, Davanagere Dr.G.K.Jayadevappa, SMS (Animal Science), KVK, Davanagere Shri J Raghuraja, SMS (Agricultural Extension), KVK, Davanagere Shri Hanumanthagouda M. Sannagoudra, SMS (Soil Science), KVK, Davanagere Shri Vijayakumar S.B., Programme Assistant (Farm Manager), KVK, Davanagere Shri Revanasiddappa G.B.P, Programme Assistant (Lab Technician), KVK, Davanagere Shri Mallikarjuna S Gudihindala, Assistant, KVK, Davanagere Smt. Mamatha H.M., Stenographer-Cum-Computer Operator, KVK, Davanagere Shri Shivakumara B., Office Attendant, KVK, Davanagere	• Polyhouse and Shade homes in the district need to put in to effective usage in collaboration with Department of Horticulture. • To give top priority for water use. Popularize aerobic rice and DSR cultivation.		
	Shri Shivakumara S.E., Field Attendant, KVK, Davanagere Shri Marulasiddaiah N.M., Jeep Driver, KVK, Davanagere Shri Shivakumara S.., Tractor Driver, KVK, Davanagere			

PART II - DETAILS OF DAVANAGERE DISTRICT

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

S. No	Farming system/enterprise
1	**Rainfed system:** Maize, Maize+Redgram, Ragi, Ragi+Horsegram, Greengram-Ragi, Minor millets, Jowar, Bengalgram , Redgram, Groundnut, Sunflower, Cotton, Mango.
2	**Irrigation (33%):** Rice- Rice, Sugarcane, Arecanut, Banana, Coconut, Papaya, Vegetable crops, Fodder crops, Pomegranate
3	**Enterprises:** Poultry, Dairy, Sheep/ Goat rearing, Fisheries, Vegetable nursery, Nursery
4	**Cropping intensity**: 122%

ICAR- Krishi Vigyan Kendra is situated in Davanagere district of Karnataka state. The district occupies a total geographical area of 5913.4 sq. km. It is spread over 6 taluks consisting 35 hoblies and 232 gram panchayaths. According to 2011 census, the district comprises total population is 19,46,905 with population density of 329 people /sq. km. The district is primarily agrarian in character and more than 75% of its population depending directly / indirectly on agriculture for their livelihood. Literacy rate in the district is 75.74% (2011 census).

Davanagere district is at center of the state and lies in between latitude of 75^0.30' and 76^0.30' and longitude of 13^0.45' and 14^0.50' with MSL of 602.5 m. The annual average rainfall of the district is 656.9 mm (Actual 463.8 mm 2016). The variety of soil is medium to deep black and red sandy loam (Details in section 2.2). The district is essentially Kharif region and majority Rabi crops will be taken up with the help of irrigation from lower Bhadra canal. (Irrigation - 33%) The district comprises of three agro climatic zones of Karnataka as given in section 2.3.

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 (Zone III)	The zone comprises Harapanahalli Tq. Major soil types of the zone are black and red soils. The main crops growing in the zone are Ragi, Maize, Jowar, Onion, Chilli, Sunflower and Minner millets, Coconut, Mango and Pomegranate.
2	Central Dry Zone (Zone IV)	Jagalur, Harihara and Davanagere Taluks come under Zone IV. We find red sandy soil mixed with clayey soil land patches of black soil in the zone. Major crops include Maize, Rice, Jowar, Sunflower, Sugarcane, Ragi, Minor millets, Vegetables, Coconut, Arecanut, Beetlevine, Groundnut, and Pomegranate.
3	Southern transitional Zone (Zone VII)	Southern transitional zone includes Channagiri and Honnali taluks. The dominating soil types found are red sandy soil and black cotton soil. Major crops growing the zone are Maize, Rice, Ragi, Cotton, Chilli, Jowar, Groundnut, Arecanut, Coconut, Mango and other Commercial crops.

S. No	Agro ecological situation	Characteristics
1	Southern Plateau and Hills	Typical semi-arid zone; About 80 % of the area falls under rainfed farming; Cropping intensity is very low. Soils are shallow and medium, loamy red, Major crops are Rice, maize, sugarcane, Arecanut, coconut and millets.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Red Sandy Soil (Harihara, Channagiri, Jagalur, Davanagere Tq.)	Low water holding capacity Neutral pH Low Nitrogen content Medium in Phosphorus and Potash	1, 26,000
2	Deep to Medium Deep Black Soil (Jagalur, Davanagere, Harapanahalli)	High water holding capacity Neutral to Alkaline pH Medium in Nitrogen and Phosphorus High Potassium	54,000
3	Mixed Red and Black Soil (Honnali, Jagalur, Harapanahalli)	Medium water holding capacity Neutral pH Medium in Nitrogen, Phosphorus and Potassium content	1, 62,000
4	Sandy Loam Soil (Harapanahalli, Davanagere)	Poor water holding capacity Neutral pH Deficient in Nitrogen, Phosphorus and Potassium	18,000
		Total	**3, 60,000**

2.4. **Area, Production and Productivity of major crops cultivated in the district (2016-17)**

Unit: Area in Hects., Prodn. In Tonnes, Cotton prodn. In bales of 170 Kg lint, Yield in Kgs/hect. Sugarcane yield in Tonnes/hect				
Sl. No.	**Crop**	**Area**	**Production**	**Yield**
1	Maize	188448	806475	4280
2	Rice	120876	569926	4715
3	Ragi	14508	31837	2194
4	Jowar	12343	29102	2358
5	Bajra	1502	2410	1605
6	Wheat	232	361	1556
7	Minor Millets	114	91	800
I	**Total Cereals:**	**338278 (78.56%)**	**1440203**	
1	Tur (Pigeon pea)	8266	10033	1214
2	Bengalgram	5777	5777	1000
3	Horsegram	1822	2525	1386
4	Blackgram	141	143	1016
5	Greengram	1113	1109	996
6	Cowpea & other	2583	3745	1450
7	Avare	1506	1292	858
II	**Total Pulses:**	**21208 (4.93%)**	**24624**	
	Total Foodgrains:	359486	1464827	4075
1	Groundnut	18228	26473	1452
2	Sesamum	136	203	1489
3	Sunflower	4586	5364	1170
4	Castor	350	385	1100
III	**Total Oilseeds:**	**23558 (5.47%)**	**32531**	
IV	**Commercial Crops:**	**47360 (11%)**	**1459244**	
1	Cotton	29267	65723	382
2	Sugarcane Planted	5910	719040	122
2a	Sugarcane Ratoon	6345	674410	106
3	Tobacco (VFC)	16	71	0
3a	Tobacco (Beedi)	5822	0	0
	GRAND TOTAL	**430404**	**2956601**	

(Source: Department of Agriculture, Davanagere)

2.4. (b) Area, Production and Productivity of Horticulture crops in the district (2016-17)

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (t /ha)
1	Arecanut	42884	73268.23	1.71
2	Coconut	14897	2559.14 Lakh Nuts	0.1718
3	Tomato	5583.20	98798.30	15.56
4	Onion	5340.3	94354.1	11.87
5	Banana	5075	76871.46	15.15
6	Mango	4376	35279	8.06
7	Oil palm	1739.79	10286.98	4.71
8	Green Chilli	1204.14	17810.91	14.79
9	Betel vine	1137.73	3768.90 Lakh Leaves	3.31
10	Marigold	1047.85	3885.85	3.71
11	Sapota	981.31	8772.14	8.94
12	Cocoa	816	597.32	0.73

Source: Department of Horticulture, Davanagere

2.5. Weather data 2017

	Rainfall (mm)	
Month	**Normal**	**Actual**
January	0.9	0.1
February	1.0	0.1
March	4.1	4.9
April	36.0	14.3
May	74.7	54.7
June	76.0	57.7
July	99.3	77.4
August	83.5	94.4
September	114.0	219.4
October	120.7	196.0
November	43.7	0
December	8.3	0
	662.2	**719.9**

* Source: Department of Agriculture, Davanagere

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

Category	**Population**	**Production**	**Productivity**
Cattle			
Crossbred	124184	238880 t	6 liter/day
Indigenous	207891		
Buffalo	175896		
Sheep			
Crossbred	167	4229.25 t	--
Indigenous	343011		--
Goats	103187		--
Pigs			
Crossbred	144	--	--
Indigenous	3684	--	--
Poultry			
Hens	31,93,472	5168.99 Lakh Eggs	--
Inland fisheries	--	16052.53 t	800

Source: Department of statistics, Davanagere : (2014-15)

2.7 District profile has been Updated for 2017-18 .: YES

2.8 Details of Operational area / Villages

Sl.No.	Taluk	Name of the 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	Harapanahalli	Chigatari	Sasvehalli, Hunsehalli & Anathanahalli	2 Years	Foxtail Millet	• Low yield, • No seed treatment with bio fertilizers ,	• Integrated Crop Management
2	Harapanahalli	Arasikere	Hallikere	2 Years	Maize	• Low yield • No intercropping of Redgram • Use of local variety of Redgram (50%) • No INM • Erratic rainfall.	• Integrated Crop Management
3	Davanagere	Mayakonda	Kodihalli	2 year	Rice,	• No seedling treatment • Incidence of stem borer, Sheath Blight, Bacterial Leaf blight	• Integrated Pest and Disease Management
4	Honnali	Nyamathi	Rameshwara Surahonne Kenchikoppa Arundi	3 Years	Wheat	• Use of local varieties • Improper Nutrient Management	• Integrated Crop Management in Wheat
5	Davanagere	Anagodu Thyavanagi	Halavurthy Thyavanagi	3 Years	Finger Millet	• Low yield • Non- availability of HYV for late Kharif • No seed treatment with bio- fertilizers • Improper nutrient management	• Integrated Crop Management in Finger Millet

Sl.No.	Taluk	Name of the 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
6	Honnali	Nyamathi	Rameshwara	3 Years	Sorghum	• Imbalanced nutrient management • Soil moisture stress • Rust and Stem borer	Integrated Crop Management in Sorghum
7	Honnali	Govinakovi	Beejogatti Govinakovi Kunkuva	2 Years	Blackgram	• Improper nutrient management • Single crop per year • Mono Cropping • Micro nutrient deficiency	Integrated Crop Management in Blackgram
8	Channagiri Davanagere Jagaluru	Santhebennur Anagodu Bilchodu	Doddabigere Parashuramapura Katenahalli	5 Years 3 years 1 Years	Redgram	• Low yield • No seed treatment with bio-fertilizers • Use of local varieties • Incidence of pod borer and wilt	Integrated Crop Management in Redgram
9	Channagiri Harapanahalli	Thyavanagi Chigateri	Thyavanagi Doddaghatta Hunasehalli	2 years 1 Years 4 Years	Bengalgram	• Low yield • No IPM measures • Poor Nutrient management	Integrated Crop Management in Bengalgram
10	Harapanahlli	Chigateri	Hunasehalli	4 Years	Bengalgram	• Low yielding varieties • No seed treatment with bio-fertilizers • Incidence of wilt	Assessment of Bengalgram Variety for Wilt and Drought Resistance
11	Harapanahalli	Chigateri	Myduru Yallapura	2 Years	Sunflower	• Low yield • No use of $ZnSO_4$ and Boron • Higher incidence of bud necrosis and head borer	Integrated Crop Management in Sunflower under NMOOP Scheme

Sl.No.	Taluk	Name of the 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
12	Jagaluru	Bilchodu	Katenahalli	1 year	Cotton	• Improper nutrient management • Square dropping • Leaf reddening • Improper spacing • Sucking pests and Pink boll worm	Integrated Crop Management in Cotton
13	Honnali	Nyamathi	Rameshwara	2 years	Onion	• Low yield • Improper nutrient management	Demonstration of Yield and Income potential of Onion, Bhima Super
14	Honnali	Nyamathi	Rameshwara	2 Years	Onion	• Low yield	Role of sulphur in improving the productivity of onion
15	Channgiri	Santhebennur	Doddabigere	4 Years	Mango	• Flower dropping • No pruning of old branches • Improper micro nutrient management	Integrated Crop Management in Mango
16	Harihara	Harihar	Shamshipura Belludi	3 years	Dairy	• Infertility/Repeat breeding & weakness in Crossbred cattle. • Clean and Quality milk production. •	Intergated Management in Dairy Animals
17	Harihara	Harihar	Banuvalli	3 years	Sheep	• Lack of grazing lands, Lower body weight gain and parasitic infestation. Infectious diseases (foot rot) in small ruminants.	Total Deworming and Balanced Nutrition in Small Ruminants for better performance.

Sl.No.	Taluk	Name of the 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
18	Harihara	Harihar	Bannikodu	3 Years	Fodder	• Scarcity of green fodder during lean season	Hydroponic Fodder Production to Alleviate fodder Scarcity.
19	Davanagere Harapanahalli Channagiri Harihara	Davanagere Harapanahalli Ubrani Malebennur	Kundawada Hanumanahalli Thogarikatte Chikkasandhi Jigali	4 Years 2 Years 1 Year 1 year 4 Years	Fisheries	• Low yield and income	Integrated Management of Fish culture in big ponds

Priority thrust areas

S. No	Thrust area
1	ICM Rice, Foxtail Millet, Begnalgram, Onion, Maize, Wheat, Finger Millet, Sorghum, Cotton, Mango, Redgram, Blackgram Sunflower,
2	Livestock Nutrition Management
3	Composite Fish culture
4	Clean Milk Production

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
04	03 (1 progress)	15	11 (3 progress)	17	9 (8 in progress) 3 (2016-17)	290 25	163 (125 in progess) 25
				3 (NFSM)	2 (1 in progress) 1 (2016-17)	150 25	100 (50 in progress) 25
				1 (NMOOP)	1	50	50

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
39	93	975	3350	569	747	3000	3142

Seed Production (Q)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
19	14.04	13000	18265

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
5000	1448	700	363

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 21aterial (No.)	Supply of livestock (No.)	Supply of bio products	
1	Integrated Crop Management	Foxtail Millet	• Low yield, • No seed treatment with bio fertilizers	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed		03			11	0.3	-	-	**No.** Azosprillium, VAM PSB-	**Kg** 9 kg 9 kg 9 kg
2	Integrated Crop Management	Maize	• Low yield • No intercropping of Redgram • Use of local variety of Redgram (50%) • No INM • Erratic rainfall.	-	Integrated Crop Managment in Maize + Redgram	2	-	-	13	-	-	-	Rhizobium and PSB	30 kg 30 kg

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 22aterial (No.)	Supply of livestock (No.)	Supply of bio products	
3	Integrated Crop Management	Rice	• Low yield • Increased cost of production • No mechanization in transplanting • Weed management		Integrated pest and disease management in paddy	2	-	-	4	-	-	-	-	-
4	Integrated Crop Management	Wheat	• Use of local Varieties • Improper Nutrient Management	-	Integrated Crop Management in Wheat	01	-	-	08	05	-	-	Azosprillium, VAM PSB-	20 kg 20 kg 20 kg
5	Integrated Crop Management	Sorghum	• Imbalanced nutrient management • Soil moisture stress • Rust and stem borer	-	Integrated Crop Management in Sorghum	01	-	-	09	0.75	-	-	Azosprillium, VAM PSB-	25 kg 25 kg 25 kg

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 23aterial (No.)	Supply of livestock (No.)	Supply of bio products	
6	Integrated Crop Management	Finger Millet	• Low yield • Non-availability of HYV for late Kharif • No seed treatment with bio-fertilizers • Improper nutrient management		Integrated Crop Management in Finger Millet	02	-	-	11	1.5	-	-	Azosprillium, PSB-	30 kg 30 kg
7	Integrated Crop Management	Blackgram (2016-17)	• Improper nutrient management • Single crop per year • Mono Cropping • Micro nutrient deficiency	-	Integrated Crop Management in Blackgram	03	-	-	08	2.5	-	-		

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 24aterial (No.)	Supply of livestock (No.)	Supply of bio products	
8	Integrated Crop Management	Redgram	• Low yield • No seed treatment with bio-fertilizers • Use of local varieties • Incidence of pod borer and wilt		Integrated Crop Management in Redgram	03	-	-	10	03	-	-	Rhizobium PSB *Trichoderma harziannum*	20 kg 20 kg 100 kg
9	Integrated Crop Management	Bengalgram	• Low yield • No IPM measures • Poor Nutrient management		Integrated Crop Management in Bengalgram	06	-	-	10	10.25	-	-	Rhizobium PSB *Trichoderma*	50 kg 20 kg 50 kg
10	Varietal Evaluation	Bengalgram	• Low yielding varieties • No seed treatment with bio-fertilizers • Incidence of wilt	Assessment of Bengalgram Variety for Wilt and Drought Resistance	-	04	-	-	13	1.2	-	-	Rhizobium PSB *Trichoderma*	12 kg 12 kg 4 kg

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 25aterial (No.)	Supply of livestock (No.)	Supply of bio products	
11	Integrated Crop Management	Sunflower	• Low yield • No use of ZnSO4 and Boran • Higher incidence of bud necrosis and head borer		Integrated Crop Management in Sunflower	03	-	-	09	-	-	-	-	-
12	Integrated Crop Management	Cotton	• Improper nutrient management • Square dropping • Leaf reddening • Improper spacing • Sucking pests and Pink boll worm		Integrated Crop Management in Cotton	04	-	-	9	-	-	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting 26aterial (No.)	Supply of livestock (No.)	Supply of bio products	
13	Varietal Demonstration	Onion	• Low yield • Improper nutrient management	-	Demonstration of Yield and Income potential of Onion, Bhima Super	03	07	0.16	-	-			*Trochoderma Veridae*	6 kg
14	Integrated Nutrient Management	Onion	• Low yield	Role of sulphur in improving the productivity of onion	-	01	-	-	09	-	-	-	*Azospirillum* PSB	1.5 kg 1.5 kg
15	Integrated Crop Management	Mango	• Flower dropping • No pruning of old branches • Improper micro nutrient management	• -	Integrated Crop Management in Mango	02	-	-	08	-	-	-	-	-

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting 27aterial (No.)	Supply of livestock (No.)	Supply of bio products	
16	Nutrition Management	Dairy	• Infertility /Repeat breeding & weakness in Crossbred cattle. • Clean and Quality milk production	-	Intergated Management in Dairy Animals	03	04	-	-	-	-	-	-	-
17	Nutrition Management	Sheep	• Lack of grazing lands, • Lower body weight gain and parasitic infestation. • Infectious diseases (foot rot) in small ruminants	-	Total Deworming and Balanced Nutrition in Small Ruminants for better performance.	02	-	-	04`	-	-	-	-	-

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 28aterial (No.)	Supply of livestock (No.)	Supply of bio products	
18	Nutrition Management	Dairy	• Production of green fodder during lean season	-	Hydroponic Fodder Production to Alleviate fodder Scarcity.	02	-	-	04	-	-	-	-	-
19	Small scale income generation	Fisheries	• Low yield and income	-	Integrated Management of Fish culture in big ponds	01	-	-	07	-	-	25000	_	-

3.B2. Details of technology used during reporting period

1. Foxtail Millet

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	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed	UAS, Dharawad, UAS, Raichur	Foxtail Millet	01		03	11

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
3		1						60		12		-	-	-	-

2. Maize

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
2	Integrated Crop Management in Maize+Redgram	UAS, Bengaluru	Maize		01	02	13

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
				11	2	16	1	30	0	28	0	-	-	-	-

3. Rice

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
3	Integrated Pest and Disease Management in Rice	UAS, Bengaluru	Rice		01	02	04

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
				3	-	7	-	13	-	21	-	-	-	-	-

4. Wheat:

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
4	Integrated Crop Management in Wheat	UAS, Dharwad	Wheat		01	01	08

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
				14	03	03	-	12	03	-	-	-	-	-	-

5. Sorghum:

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
5	Integrated Crop Management in Sorghum	UAS, Dharwad	Sorghum		01	01	09

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
				20	05	-	-	14	03	-	-	-	-	-	-

6. Finger Millet

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
6	Integrated Crop Management in Finger Millet	UAS, Benglauru	Finger Millet		01	02	11

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
				11	01	13	03	24	-	14	02	-	-	-	-

7. Blackgram

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
7	Integrated Crop Management in Balckgram	UAS, Dharwad	Blackgram		01	03	08

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
				25	-	-	-	75	-	11	-	-	-	-	-

8. Redgram

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
8	Integrated Crop Management in Redgram	UAS, Bengaluru	Redgram		01	03	10

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
				46	01	03	-	79	02	11	-	-	-	-	-

9. Bengalgram

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
9	Integrated Crop Management in Bengalgram	UAS, Bengaluru	Bengalgram		01	06	10

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
				40	-	-	-	203	-	02	-	-	-	-	-

10. Bengalgram

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
10	Assessment of Bengalgram Variety for Wilt and Drought Resistance	UAS, Dharwad JNKVV & ICRISAT UAS, Raichur	Bengalgram	01	-	04	11

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
03	-	-	-	-	-	-	-	21	-	05	-	-	-	-	-

11. Sunflower

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
11	Integrated Crop Management in Sunflower	UAS, Bengaluru	Sunflower		01	03	09

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
				41	05	04	-	86	02	12	-	-	-	-	-

12. Cotton

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
12	Integrated Crop Management in Cotton	UAS, Benglauru	Cotton		01	04	09

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
				18	01	06	-	53	02	21	01	-	-	-	-

13. Onion

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
13	Demonstration of Yield and Income potential of Onion, Bhima Super	AICRP on Onion and Garlic, RC, Babbur	Onion		01	03	07

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
				04	-	01	-	40	23	-	-	-	-	-	-

14. Onion

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
14	Role of sulphur in improving the productivity of onion	UAS, Bengalauru DORG, Pune	Onion	01		01	09

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
03	02	-	-	-	-	-	-	07	05	-	-	-	-	-	-

15. Mango (2016-17)

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
15	Integrated Crop Management in Mango	IIHR, Bengaluru	Mango		01		

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
				09	01	-	-	35	02	12	-				

16. Dairy

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
16	Intergated Management in Dairy Animals	KVAFSU, Bidar	Dairy		01	03	04

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
				13	02	-	-	72	05	-	-	-	-	-	-

17. Sheep

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
17	Total Deworming and Balanced Nutrition in Small Ruminants for better performance.	KVAFSU, Bidar	Sheep		01	02	04

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
				14	01	-	-	35	-	02	-	-	-	-	-

18 . Dairy - Hydroponics

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
18	Hydroponic Fodder Production to Alleviate fodder Scarcity.	NIANP, Benglauru	Hydroponics		01	02	04

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
				09	-	01	-`	46	-	05	-	-	-	-	-

19 . Fisheries (2016-17)

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
19	Integrated Management of Fish culture in big ponds	UAS (B) & KVAFSU, Bidar	Fisheries		01	04	09

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
				05	-	-	-	75	08	-	-	-	-	-	-

PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	01		01		01					**03**
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.A2. Abstract on the number of technologies refined in respect of crops

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

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

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

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	Onion	Role of sulphur in improving the productivity of onion	05	05	0.6 ha
Varietal Evaluation	Bengalgram	Assessment of Bengalgram Variety for Wilt and Drought Resistance	03	03	1.5 ha
Integrated Pest Management					
Integrated Crop Management	Foxtail Mellet	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed	03	03	1.2 ha.
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					

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

4.B.2. Technologies Refined 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					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					

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

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

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

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

1. Foxtail Millet

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
Foxtail Millet	Rainfed	• Low yield • No seed treatment with bio fertilizers	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed	04	T.O.1 : (Farmer practice) HMT-100-1	UAS, Dharwad	6.3	q/ha	Germination : 90 %: Plant Height: 120.1 cm Panicle Length : 16.1 cm Test weight : 3.94 g	6,545	1.8	
					T.O.2 : SiA-2644	UAS, Raichur	8.0		Germination: 95 %: Plant Height: 127.8 cm Panicle Length : 19.5 cm Test weight : 4.1 g	9,460	2.47	
					TO 3: DHFt-109-3	UAS, Dharawad	8.6		Germination: 95 %: Plant Height: 136.3 cm Panicle Length : 28.2 cm Test weight : 4.11 g	11,085	2.49	

2. Bengalgram

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
Bengalgram	Rainfed	• Low yielding varieties • No seed treatment with bio-fertilizers • Incidence of wilt	Assessment of Bengalgram Variety for Wilt and Drought Resistance	03	T.O.1 : (Farmerpractice): JG-11	UAS, Dharwad	8.5	q/ha	Germination : 70 %: Plant Height: 30.6 cm No. of pod/plant: 64.3 Duration: 102 days	24930	1.99	
					T.O.2 : JAKI-9218	JNKVV & ICRISAT	9.3		Germination : 75 %: Plant Height: 35.7 cm No. of pod/plant: 66.5 Duration: 115 days	29670	2.18	
					TO 3: GBM-2	UAS, Raichuru	11.5		Germination : 75 %: Plant Height: 44.9 cm No. of pod/plant: 68.9 Duration: 120 days	42350	2.66	

3. Onion

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
Onion	Rainfed	Low yield	Role of sulphur in improving the productivity of onion	05	T.O.1 : (Farmerpractice): 100:75:20 kg N:P_2O_5:K_2O/ha along with FYM	Farmer practice	179.6	q/ha	Size of bulb: 10.58 cm Weight of bulb-69.09 g	108287	2.01	
					T.O.2 : RDF (125:50:125 Kg N:P_2O_5:K_2O /ha) along with FYM	UAS (B)	185.0		Size of bulb: 12.20 cm Weight of bulb-79.30 g	115717	2.09	
					TO 3: RDF (125:50:125 Kg N:P_2O_5:K_2O /ha) along with FYM and 45kg sulphur through elemental sulphur	DOGR, Pune	204.2		Size of bulb: 12.64 cm Weight of bulb-82.16 g	138040	2.29	

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

1. Foxtail Millet:

1. **Title of Technology Assessed** : Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed

2. Performance of the Technology on specific indicators:

3. **Specific Feedback from farmers:** Crop suffered severely due to moisture stress, long dry spells of 30 days during the vegetative growth, SiA-2644 and DHFt-103-3 were good varieties for drought tolerance.

4. Specific Feedback from Extension personnel and other stakeholders:

5. Feedback to Research System based on results and feedback received: High yielding varieties should be made available to farmers.

2. Bengalgram:

1. **Title of Technology Assessed** : Assessment of Bengalgram Variety for Wilt and Drought Resistance

2. Performance of the Technology on specific indicators:

3. **Specific Feedback from farmers:** JAKI 9218 is better compared to other varieties. Resistant to wilt and seed are bold. GBM-2 requires irrigation and seeds are bold.

4. Specific Feedback from Extension personnel and other stakeholders: GBM-2 yields better with 2 irrigations and suited for mechanical harvesting.

5. Feedback to Research System based on results and feedback received: High yielding varieties should be made available to farmers.

2. Onion:

1. **Title of Technology Assessed** : Role of sulphur in improving the productivity of onion

2. Performance of the Technology on specific indicators: Application of sulpher increases thr bulb size (10%) and weight (18%)

3. **Specific Feedback from farmers:** Onion production can be increased by applying sulpher during sowing time.

4. Specific Feedback from Extension personnel and other stakeholders: Fetcehes good market price.

5. Feedback to Research System based on results and feedback received: Find the role of other nutrients like silicon in onion production

4.D1. Results of Technologies Refined

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 (Farmerpractice)							
					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

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 17-18	Sunflwoer	MSFH -17	-	ICM	**Integrated Crop Management in Sunflower** • ICM in Sunflower; Use of KBSH-53/MFSH-17 @ 5 kg/ha.; • Application of ZnSO4 10kg/ha; • Spraying with Boron 0.1% at the time of flowering (1.0 kg/ha); • Spraying with KNO3 @ 2kg/ha at 35 DAS; PP measures- • Spray with Imidacloprid @0.3ml / l at 45 and 60 DAS against bud necrosis- 200ml/ha; • Spray with Indaxicarb @ 0.3ml/l against head borer- 200 ml/ha; • Spraying with Mancozeb @ 1g/l of water	20	20	04	46	41	09

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
2	Pulses	Rainfed	Rabi 16-17	Blackgram (NFSM)	DBG V-2	-	ICM	**Integrated Crop Management in Blackgram** • Use of DBGV-5 seeds: 25 kg/ha; • Seed treatment with Calcium chloride @ 2%; • Application of biofertilizers; • Spray with Pulse Magic @ 5 kg/ha (10 g/l); • Spray with Imidachloprid @ 0.3 ml/l -200 ml /ha. • Spray with Hexaconazole @ 1 ml/l- 500 ml/ha	10	10	-	25	20	05

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
		Rainfed	Kharif 17-18	Redgram (NFSM)	BRG-5	-	ICM	**Integrated Crop Management in Redgram** • Use of BRG-5 medium duration wilt resistant variety • Use of Rhizobium, PSB 2.5 kg/ha and Trichoderma harziannum @ 5kg/ha, • Spray with Pulse magic (UAS, Raichur) 10g/l @ 5kg/ha, • Installation of Pheromone traps @ 8no. / ha(16 lures), • Spray with Profenophos @ 2ml/l- ovicidal- 1 l/ha, • Spray with Neem based insecticide @3ml/l – 1l /ha, • Spray with Indaxicarb @0.5ml/l -200 ml / ha	20	20	03	47	39	11

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
		Rainfed	Rabi 17-18	Bengalgram (NFSM)	JAKI-8218	-	ICM	**Integrated Crop Management in Bengalgram** • Use of HYV JAKI-9218 @ 62.5 kg/ha; • Seed treatment with Trichoderma harziannum @4gm/kg of seed. • Seed treatment and soil application of Rhizobium, PSB and VAM @ 2.0 kg each /ha; • Pulse magic @ 5kg/ha (50% each at flowering and pod formation); Use of trap crop @ 5kg/ha; • Use of bird perches; • Use of pheromone traps @10/ha; 1st spray with ovicidal insecticides Profenophos @ 2 ml / l	20	20	-	40	29	11

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
3	Cereals	Rainfed	Kharif 17-18	Maize	Hybrid	Priv ate	ICM	**Integrated Crop Management in Maize + Redgram;** • Management (Spray with Chlorpyrifos @ 2ml/l (Stem Borer) and Mancozeb-2.5g/l (Downey mildew) for Maize; • Medium duration, wilt tolerant and red seeds BRG-5 variety; • Seed treatment with bio fertilizers Azosprillium, PSB, VAM @ 3 kg • Spray with Pulse magic (UAS, Raichur) 10g/l @ 5kg/ha; • Installation of Pheromone traps @ 8no. / ha (16 lures);	12	12	17	13	20	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
								• Spray with Profenofos @ 2ml/l- Ovicidal- 1 l/ha; • Spray with Neem based insecticide @3ml/l – 1 l /ha; Spray with Indaxicarb @0.5ml/l -200 ml/ha						
		Irrigated	Rabi 16-17	Rice	Variety	Priv ate	IPD M	• Soil test based nutrient application, • Seed treatment with Carbendizim @ 4g/kg of seed, • Spraying with neem oil @ 3ml/l in nursery • Clipping of seedlings during transplanting, • Leaving one row of gap for every 3-4 m of transplanting, • Removal of weeds around bunds,	4	4	7	3	5	5

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
								• Soil application of Pseudomonas fluorescence @5kg/ha at 30 DAT, • Installation of funnel traps @10/ha, • Drain out excess water immediately after notice of pests, Mix 500 ml of DDVP with 5 kg sand and apply, • Next day spray with Acephate @ 1 g and Chlorpyrifos @ 2.5 ml/l , • Need based spray with Tricyclazole, Hexaconazole and Buprofezin						
		Rainfed	Rabi 17-18	Wheat	Variety- UAS-347	-	ICM	• Introduction of variety UAS-347; • Seed treatment with Azotobactor, PSB @ 500g/ha;	08	08	17	03	15	05

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
								• Spraying of 19:19:19 @ 5g/l and micronutrient solution @ 3-4 ml/l at 30DAS; • Spraying of Chlorpyrifos 20EC- @ 2ml/l to manage stem borer; • Spraying of Hexaconazole @ 1ml/l to manage rust; • Weed and water management						
		Rainfed	Rabi 17-18	Sorghum	SPV-2217		ICM	• Variety SPV-2217; • Seed treatment with calcium chloride to induce drought tolerance (overnight soaking); • Seed treatment with Azotobactor, PSB @ 500g/ha;	10	10	-	25	20	05

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
								• Spraying of 19:19:19 @ 5g/l and micronutrient solution @ 3-4 ml/l at 30 DAS; • Spraying of Chlorpyrifos 20EC- @ 2ml/l to manage stem borer; • Spraying of Hexaconazole @ 1ml/l to manage rust; • Weed and water management						
4	Millets	Rainfed	Kharif 17-18	Finger Millet	ML-365	-	ICM	**ICM Finger Millet (ML-365)** • Soil test based nutrient Application • Seed treatment with bio-fertilzers • $ZnSO_4$ • Water soluble fertilizers (13:00:45@ 5g/ l	12	12	16	12	20	08
5	Vegetables	Rainfed	Kharif 17-18	Onion	Bheema Super	-	Varietal Demonstratin	• Introduction of Bhima Super Variety, • Application of Gypsum @ 2.5q/ha,	02	02	01	04	-	05

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
								• Seed treatment with Trichoderma harzianum, • use of post emergant herbicides, • Foliar nutrition with water soluble fertilizers, • plant two rows of maize or outer row of maize sarrounding onion crop (250 sq.m) atleast 30 days prior to transplanting to block adult thrips						
7	Flowers													
8	Ornamental													
9	Fruit													
10	Spices and condiments													
11	Commercial	Rainfed	Kharif 17-18	Cotton	-	Bt	ICM	• Proper spacing (4 x 4 feet) • Marigold as trap crop • Use of yellow stick traps •	10	10	6	19	19	06

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
								• Spraying of planofix @ 1 ml/4.5 l • Use of pheroman traps @ 25/ha • Spraying of MgSO4 1 % @ 75 & 90 DAS						
12	Medicinal and aromatic													
13	Fodder	-	-	Hydroponics	-	-	Nutrition Management	• Hydroponic Fodder Production to Alleviate fodder Scarcity.	10	10	01	09	08	02
14	Plantation	Rainfed	Rabi 2016-17	Mango	Alphnso	-	ICM	**Integrated crop management in mango** • Foliar application of planofix @ 0.25 ml/4 l • RDF & Pruning of old branches • Mango special @ 5 g/l • Imidacloprid @ 0.5 ml/l • Application of COC to stem @ 3g/l • Use of fruit fly traps	04	04	-	10	09	01

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
15	Fibre													
16	Dairy	-	2017-18	Cows	HFx-INM	Integrated Nutrition Managment	Integrated Management in Dairy Animals	• Feeding dairy animals as per the Indian Standards (NRC standards)specifications by adopting Total Mixed Ration Cocept.	15	15	-	15	13	02
17	Poultry													
18	Rabbitry													
19	Piggery													
20	Sheep and goat	-	2017-18	Sheep	Local	Nutrition Management	Total Deworming and Balanced Nutrition in Small Ruminants for better performance.	Balancing the Nutrition. 2. Cotrolling of worms infestation.	15	15	01	14	13	02
21	Duckery													

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
22	Common carps	Irrigated	-	Fisheries	*Catla, Common carp, Rohu, Pangasius*	-	Small scale income generation	Integrated Management of Fish culture in big ponds	10	10	-	05	03	02
23	Mussels													
24	Ornamental fishes													
25	Oyster mushroom													
26	Button mushroom													
27	Vermicompost													
28	Sericulture													
29	Apiculture													
30	Implements													
31	Others (specify)													

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1	Oilseeds	Rainfed	Kharif 17-18	Sunflower	MFSH -17	-	ICM	Integrated Crop Management in Sunflower	Kharif 17-18	L	M	M	Maize
2	Pulses	Rainfed	Rabi 16-17	Blackgram (NFSM)	DBGV -2	-	ICM	Integrated Crop Management in Blackgram	Rabi 16-17				Rice
		Rainfed	Kharif 17-18	Redgram (NFSM)	BRG-5	-	ICM	Integrated Crop Management in Redgram	Kharif 17-18	L	M	M	Maize
		Rainfed	Rabi 17-18	Bengalgram (NFSM)	JAKI-8218	-	ICM	Integrated Crop Management in Bengalgram	Rabi 17-18	L	M	M	Rice
3	Cereals	Rainfed	Kharif 17-18	Maize	Hybird	Private	ICM	Integrated Crop Management in Maize +Redgram	Kharif 17-18	L	M	M	Maize
		Irrigated	Rabi 16-17	Rice	Variety	-	IPDM	Integrated pest and disease management in Rice	Rabi 16-17	M	H	M	Rice
		Rainfed	Rabi 17-18	Wheat	UAS-347	-	ICM	Integrated crop management in wheat	Rabi 17-18	L	M	M	Maize
		Rainfed	Rabi 17-18	Sorghum	SPV-2217	-	ICM	Integrated crop management in Sorghum	Rabi 17-18	L	M	M	Maize
4	Millets	Rainfed	Late Kharif 17-18	Finger Millet	ML-365	-	ICM	Integrated crop management in Finger Millet	Late Kharif 17-18	L	M	M	Maize

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil		Previous crop grown	
										N	P	K	
5	Vegetables	Rainfed	Kharif 17-18	Onion	Bheema Super	-	Varietal Demonstration	Demonstration of Yield and Income potential of Onion, Bhima Super	Kharif 17-18	M	L	M	Ground nut
6	Flowers												
7	Ornamental												
8	Fruit												
9	Spices and condiments												
10	Commercial	Rainfed	Kharif 17-18	Cotton	-	Bt	ICM	Integrated crop management in Cotton	Kharif 17-18	L	M	M	Maize Cotton
11	Medicinal and aromatic												
12	Fodder												
13	Plantation	Rainfed	Rabi 16-17	Mango	Alphanso	-	ICM	Integrated Crop Management in Mango	Rabi 16-17	M	M	H	Mango
14	Fibre												

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	Integrated Crop Management in Sunflower (NMOOP 17-18)		MSFH-17	Rainfed	50	20	16.3	12.9	15.5	11.55	28.99	22904	42548	19644	1.86	21274	32241	10966	1.52
Pulses	Integrated Crop Management in Blackgram (NFSM, 16-17)	DBGV-2	-	Rainfed	25	10	6.71	3.68	5.81	5.10	4.81	14500	38346	23846	2.64	13800	33669	19869	2.43
	Integrated Crop Management in Redgram (NFSM, 17-18)	BRG-5	-	Rainfed	50	20	14.8	8.1	11.9	9.36	27.13	12063	40480	28417	3.34	11816	29958	18142	2.53
	Integrated Crop Management in Bengalgram (NFSM, 17-18)	JAKI-8218	-	Rainfed	40	20	12.9	9.75	11.32	8.75	29.37	24105	46432	22327	1.92	21872	35905	14033	1.64

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
Cereals	Integrated Crop Management in Maize +Redgram	-	Private	Rainfed	30	12	42.45	22.94	35.38	30.00	17.86	34876	38918.44	4042.44	1.11	30014	33005.28	2991.28	1.09
	Integrated pest and disease Management in Rice	Private	-	Irrigated	10	04	45.5	38.9	42.26	36.81	14.8	41625	76068	34443	1.83	45800	66258	20458	1.45
	Integrated Crop Management in Wheat	UAS-347	-	Rainfed	20	08	11.54	6.38	10.44	8.92	17.04	14339	22974	8635	1.6	13217	19639	6421	1.49
	Integrated Crop Management in Sorghum	SPV-2217	-	Rainfed	25	10	14.55	7.65	12.39	10.62	20.3	13165	18588	5423	1.44	11838	15935	4097	1.35
Millets	Integrated Crop Management in Finger Millets	ML-365	-	Rainged	28	12	25.5	22.5	24.96	20.81	19.7	30000	76837	46838	2.56	30027	65512	35485	2.19
Vegetables	Demonstration of Yield and Income potential of Onion, Bhima Super	Bheema Super	-	Rainfed	05	02	206	177	194.6	160.4	21.32	96457	233524	137066	2.43	105280	192480	87199	1.82
Flowers																			

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
Ornamental																			
Fruit																			
Spices and condiments																			
Commercial	Integrated Crop Management in Cotton	-	Bt	Rainfed	25	10	17.49	11.83	15.02	13.19	14.02	28300	72130	43830	2.55	29550	63156	33703	2.14
Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder	Hydroponic Fodder Production to Alleviate fodder Scarcity.	-	-	-	10	-	1.93	1.84	1.88	-	-	35075	53451	18376	1.52	35075	41500	6425	1.18

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
Plantation	Integrated Crop Management in Mango	Alphanso	-	Rainfed	10	04	68.06	50.38	60.4	36.27	66.52	50896	1511012	100115	2.97	44016	90677	46660	2.07
Fibre																			
Others																			

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

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		
Crop	**Parameter with unit**	**Demo**	**Check**
Maize	Plant Height (cm)	207.12	198.82
	Pods/plant (redgram) (No.)	68.18	59.64
	Wilt incidence (Redgram) (%)	2.48	11.64
Rice	Incidence of Stem Borer (%)	4.5	11.75
	Plant Height (cm)	91.43	89.48
	No. of Tillers	24.09	21.66
Wheat	Plant Height (cm)	71.57	65.99
	Test Weight (g)	37.91	37.77
Sorghum	Plant Height (cm)	195.32	199.96
	Test Weight (g)	40.03	37.67
	Size of the Head (cm)	22.24	20.64
Finger Millet	Plant Height (cm)	120.26	115.42
	No. of Tillers / hill	7.9	4.65

	Data on other parameters in relation to technology demonstrated		
Crop	**Parameter with unit**	**Demo**	**Check**
	Fodder Yield (t/ha.)	48.39	45.64
Blackgram (NFSM 2016-17)	Germination (%)	93.5	88.7
	Plant Height (cm)	42.01	37.3
	No. of pods/ plant (No.)	19.9	18.41
	Pod length (cm)	4.8	4.6
Redgram (NFSM 2017-18)	Plant Height (cm)	190.75	172.48
	No. of pods / plant (No.)	98.99	77.31
	Incidence of pod borer (%)	4.2	12.5
	Incidence of wilt (%)	3.15	6.25
Bengalgram (NFSM 2017-18)	Plant Height (cm)	32.85	28.65
	No. of pods / plant (No.)	73.11	59.67
	Incidence of wilt (%)	3.96	10.08
Sunflower (NMOOP 2017-18)	Plant Height (cm	190.2	182.7
	Test weight (g)	51.29	47.98
	Head size (cm)	13.9	13.0
Cotton	Incidence of sucking pest (%)	5.57	17.72
	Incidence of pink bollworm (%)	6.25	16.5
Onion	Germination (%)	93	84.2
	Average weight of bulb (g)	109.8	91.6
Mango	No. of fruits / tree (No.)	230.2	178
	Average Weight of fruits (g)	263.1	203.9
Hydroponics	Milk yield (l)	2138	1660
	Milk Quality (CLR)	1.0273	1.025
	Voluntary intake (%)	100	90

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	Intergated Management in Dairy Animals	HFx	15	15	5488 L	1857 L	2208 L	1242 L		35031	55071.7	20040.7	1.57	29890	31063	1173	1.03
Poultry																	
Rabbitry																	
Piggerry																	
Sheep and goat	Total Deworming and Balanced Nutrition in Small Ruminants for better performance.	Local	15	15	113.5 kg/90 days	66 kg/90 days	99.33 kg/ 90 days	33.5 kg/90 days		5770	19866	14096	3.45	3600	6700	3100	1.86
Duckery																	
Others																	

* 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 yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

	Data on other parameters in relation to technology demonstrated		
	Parameter with unit	**Demo**	**Check if any**
Dairy	Heat symptoms and conception rate	Prominent and 100 %	Mild and Nil
Sheep	Cost of meat production (Rs./kg)	60.13	107.46

5.B.3. Fisheries

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	ICM of fish culture in big earthern ponds with bigger fingerlings.	*Catla, Common carp, Rohu, Pangasius*	05	05 units	125	65	80.52	60	34.2	190500	637500	447000	3.2	30000	48000	18000	1.6
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**
Average body weight of fish (kg)	0.93	

5.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Yield				% 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										
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
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., additional income realized, employment generation, quantum of farm resources recycled etc.)

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

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)
					Demo	Check		

*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
Gross cost	**Gross Return**	**Net Return**	** **BCR**	**Gross Cost**	**Gross Return**	**Net Return**	** **BCR**

* 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 laboursaved (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

1. Maize+ Redgram

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	1	33	
2	Farmers Training	2	61	
3	Media coverage	3	-	Vijayakarnataka Vijayavani
4	Training for extension functionaries	-	-	
5	Others (Please specify)- Method Demonstration	3	95	• Soil sampling techniques • Sowing time - seed treatment • Preparation of Pulse magic solution

2. Rice

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	22	
2	Farmers Training	02	35	
3	Media coverage	-	-	
4	Training for extension functionaries	-	-	
5	Others (Please specify)- Method Demonstration	03	23	

3. Wheat

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	52	
2	Farmers Training	01	15	
3	Group Discussion	01	17	
4	Others (Please specify)- Method Demonstration	01	15	

4. Sorghum

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	05	59	
2	Media Coverage	01	-	Negila meditha (UAHS, Shivamogga)
3	Farmers Training	01	17	
4	Group Discussion	01	12	
5	Others (Please specify)- Method Demonstration	01	17	

5. Finger Millet

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	05	81	
2	Farmers Training	02	43	
3	Group Discussion	02	59	
4	Media coverage	01	-	Vijayakarnataka
5	Others (Please specify)- Method Demonstration	02	29	

6. Blackgram (NFSM 2016-17)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	04	92	
2	Farmers Training	03	100	
3	Group Discussion	01	29	
4	Others (Please specify)- Method Demonstration	02	48	Seed treatment with bio-fertilizers, pulse magic spray solution preparation and installation of yellow sticky traps

7. Redgram (NFSM 2017-18)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	08	78	
2	Farmers Training	03	65	
3	Group Discussion	02	48	
	Farmers Seminar	01	44	To motivate FLD farmers to sell BRG-5 variety as a seed purpose in collaboration with Dept. of Agriculture and RCF Ltd.
4	Others (Please specify)- Method Demonstration	03	56	

8. Bengalgram (NFSM 2017-18)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	07	109	
2	Farmers Training	06	205	
3	Group Discussion	01	27	
4	Field Day	02	129	

9. Sunflower (NMOOP 2017-18)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	08	98	
2	Farmers Training	03	65	
3	Group Discussion	02	48	
4	Field Day	01	44	
6	Method Demonstration	03	57	Soil sampling, pulse magic spray solution preparation

10. Cotton

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	05	68	
2	Farmers Training	04	87	
3	Group Discussion	02	81	
4	Field Day	01	46	
5	Others (Please specify)- Method Demonstration	01	23	

11. Onion

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	03	36	
2	Farmers Training	03	63	
3	Group Discussion	01	50	
4	Field Day	01	78	
5	Media Coverage	01	-	Kannada Prabha
6	Others (Please specify)- Method Demonstration	01	21	

12. Mango

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	5	39	
2	Farmers Training	2	49	
3	Group Discussion	1	15	
4	Field Day	1	29	
5	Others (Please specify)- Method Demonstration	1	18	On use of mango special

13. Dairy

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	02	22	
2	Farmers Training	03	83	
3	Group Discussion	01	35	
4	Method Demonstration	01	29	

14. Sheep

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	02	33	
2	Farmers Training	02	41	
3	Group Discussion	01	31	
4	Method Demonstration	01	16	Use of mineral supplements

15. Hydroponics

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	02	28	
2	Farmers Training	02	51	
3	Group Discussion	01	25	
4	Method Demonstration	01	12	Hydroponic unit construction

16. Fisheries

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field Visits	06	21	
2	Farmers Training	04	83	
4	National Fish Farmers Day	01	67	
5	World Fisheries Day	01	81	

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Cereals																	
Bajra																	
Maize	Integrated Crop Management in Maize +Redgram	Private	30	12	42.45	22.94	35.38	30.00	17.93	34876	38918.44	4042.44	1.11	30014	33005.28	2991.28	1.09
Paddy																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower	Integrated Crop Management in Sunflower (NMOOP 17-18)	MSFH-17	50	20	16.3	12.9	15.5	11.55	28.99	22904	42548	19644	1.86	21274	32241	10966	1.52
Groundnut																	
Soybean																	
Others																	
Total																	
Pulses																	
Greengram																	

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Blackgram																	
Bengalgram																	
Redgram																	
Others (pl.specify)																	
Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Others (pl.specify)																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others Cotton	Integrated Crop Management in Cotton	Bt	25	10	17.49	11.83	15.02	13.19	14.02	28300	72130	43830	2.55	29550	63156	33703	2.14
Total																	
Fodder																	

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Maize (Fodder)																	
Sorghum (Fodder)																	
Total																	

H-High L-Low, A-Average ,
*Please ensure that the name of the hybrid is correct pertaining to the crop specified

Other Works : Farm Trials:

1. Gopika red rice variety Sponsored by National Innovation Foundation-India, Ahmadabad

Name of the farmers & address : Mr. Anjaneya A.N.
Kumbalur post
Harihara tq.
Davanagere dist.

Mobile No. : 9972088929

Date of sowing : 25-07-2017

Date of Harvesting : 02-11-2017

Situation : Irrigated and organic farming

Area : 0.015 ha.

Results:

Sl. No.	Parameters	Results
1	Plant height (cm)	88
2	No. of tillers / hill	5.8
3	Length of leaf (cm)	23.4
4	Length of panicle (cm)	17.6
5	Yield per plot (0.015 ha)	74 kg
6	Yield (q/ha)	49.33

2. Assessment of Different Maize Hybrids for yield potential Sponsored by CIMMYT-Hyderabad

CROP	HYBRID ENTRIES	Yield q/ha	Gross Cost Rs/ha	Gross Return Rs./ha	Net Return Rs./ha	B:C ratio
Maize Hybrid	1. TA-5084	69.5	38,455	86,875	48,420	2.25
	2. TA-5144	72.6	38,455	90,750	52,295	2.35
	3. CAH-1525	68.5	38,455	85,625	47,170	2.22
	4. CAH-169	65.3	38,455	81,625	43,170	2.12

3. Assessment of Different Maize Hybrids for yield potential Sponsored by UAHS, Shivamogga

Parameters	Doddabigere Channagiri Tq		Rameshwara Honnali Tq	
	MAH 14-5	**NAH 1137 (Hema)**	**MAH 14-5**	**NAH 1137 (Hema)**
Plant height (cm.)	179	176	181	178
No. of rows/ cob	16.66	15.99	15.83	15.03
Length of cob (cm)	17.5	16.8	17.1	16.4
No. of grains/row	39.92	36.66	38.68	37.19
Yield (kg/gunta)	126.00	116.78	121.80	116.20
Yield/ha.(kg)	6300	5839	60.90	5810

Entrepreneurship Development Programme for Mango Producers

In Progress:

- **Village: Doddabbigere,** Channagiri tq.
- **No. of farmers:** 05
- **Activities taken up so for:**

1. Exposure visit to ICAR-Krishi Vigyan Kendra, Ramanagara on 03-11-2017. The farmers were exposed to high density planting system, ripening process using safer chemicals and packaging for marketing. Also, Mango entrepreneurs who had taken up production and marketing activities with their own branding were met and discussed.
2. Established portable ripening chamber at Doddabbigere and farmers are using this chamber for Mango ripening..
3. The village which has 1500 aces of Mango witnessed 3 years drought situation and yield reduction up to 80 %.

Farmer Field School 2017-18

Crop: Rice

Title: : Mechanization in Rice production through DSR

Village : Thyavanagi, Channagiri tq.

Area **:** 1 acre

Collaborator **:** Mr. N.V. Subba Rao

Facilitator **:** SMS (Agronomy)

Crop Status : Grain filling stage.

Activities **:**

Sl. No.	Date	Activities
1	17-01-2018	Land preparation, Seed selection, Seed treatement for dry seeded rice
2	01-02-2018	Integrated weed and nutrient management
3	09-03-2018	Integrated water and pest management
4	22-04-2018	Management of BPH and Army worm in DSR.

PART VII. TRAINING

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	04	74	01	75	18	03	21	92	04	96
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables	01	24	06	30	05	06	11	29	12	41
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production and 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	02	30	-	30	26	-	26	56	-	56
Integrated water management										
Integrated nutrient management	01	103	04	107	07	-	07	110	04	114
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	03	66	07	73	-	-	-	66	07	73
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	02	33	02	35	01	-	01	34	02	36
Animal Disease Management	01	-	14	14	01	-	01	01	14	15

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Feed and Fodder technology	01	04	05	09	01	-	01	13	06	19
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management										
Integrated Disease Management	01	38	-	38	02	-	02	40	-	40
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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	01	99	01	100	06	00	06	105	01	106
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics	02	85	-	85	09	-	09	94	-	94
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies	01	78	05	83	15	-	15	93	05	98
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**20**	**634**	**45**	**679**	**91**	**09**	**100**	**735**	**54**	**779**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management	01	15	-	15	-	-	-	15	-	15
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation	01	01	-	01	28	-	28	29	-	29
Seed production										
Nursery management										
Integrated Crop Management	07	201	-	201	33	2	35	234	2	236
Soil and Water Conservation										
Integrated Nutrient Management	05	10	02	112	17	-	17	27	02	129
Production of organic inputs										
Others (Seed treatement)`	03	41	01	42	23	-	23	64	01	65
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables	01	-	25	25	-	-	-	-	25	25
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization	01	04	06	10	-	-	-	04	06	10
Protective cultivation										
Others (pl.specify)										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology	03	73	06	79	37	01	38	110	07	117
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production and 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	04	87	14	101	09	-	09	96	14	110
Integrated water management	01	20	-	20	03	-	-	-	11	02
Integrated nutrient management	01	11	02	13	-	-	-	11	02	13
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	03	56	06	62	10	-	10	66	06	72
Nutrient use efficiency	01	06	13	19	-	-	-	06	13	19
Balanced use of fertilizers										
Soil and water testing	02	36	05	41	08	-	08	44	05	49
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	02	69	02	71	06	-	06	75	02	77
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management	01	21	-	21	01	-	01	22	-	22

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	05	74	02	76	19	01	20	93	03	96
Integrated Disease Management	03	48	-	48	16	-	16	64	-	64
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others **(Safe use of Pesticides)**	01	09	-	09	02	-	02	11	-	11
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										

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)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital	01	40	62	102	01	10	11	41	72	113
Entrepreneurial development of farmers/youths										
Others (Mobie App Uploading)	01	29	-	29	-	-	-	29	-	29
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	**48**	**961**	**146**	**1107**	**216**	**14**	**230**	**1177**	**160**	**1337**

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										
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										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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 : Orientation for 2nd PUC students	07	269	130	408	13	21	34	282	160	442
Role of youth in Agriculture	01	12	11	23	04	04	08	16	15	31
TOTAL	**08**	**281**	**150**	**431**	**17**	**25**	**43**	**298**	**175**	**473**

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										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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										
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										
TOTAL										

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	01	22	02	24	-	-	-	22	02	24
Integrated Pest Management										
Integrated Nutrient management	03	57	57	114	-	27	27	57	84	141
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	01	12	02	14	07	-	07	19	02	21
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**05**	**91**	**61**	**152**	**07**	**27**	**34**	**98**	**88**	**186**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
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	02	55	00	55	15	-	15	60	-	40
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										
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										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
12	**Agricultural Extension**										
12.a.	CapacityBuilding and Group Dynamics										
12.b.	Others (Soil and Water conservation and crop selection in watershed area	**10**	**257**	**36**	**293**	**13**	**99**	**212**	**370**	**135**	**505**
	Total	**12**	**312**	**36**	**348**	**128**	**99**	**227**	**440**	**135**	**575**

Details of sponsoring agencies involved

1. Departement of Horticulture

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

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										
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										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
	Grand Total										

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	13	370	56	426	43	8	51	45	13	58
Kisan Mela	02	> 5 Lakh								
Kisan Ghosthi	28	5324	2230	7554	450	195	645	190	72	262
Exhibition	01	340	15	355	65	5	70	0	0	0
Film Show	--	--	--	--	--	--	--	--	--	--
Method Demonstrations	30	673	0	673	170	0	170	129	30	159
Farmers Seminar	08	158	14	172	19	5	24	15	5	20
Workshop	--	--	--	--	--	--	--	--	--	--
Group meetings	01	20	0	20	0	0	0	3	0	3
Lectures delivered as resource persons	151	3174	1720	4894	979	457	1436	3136	447	3583
Newspaper coverage	55	--	--	--	--	--	--	--	--	--
Radio talks	01	--	--	--	--	--	--	--	--	--
TV talks	04	--	--	--	--	--	--	--	--	--
Popular articles	15	--	--	--	--	--	--	--	--	--
Extension Literature	--	--	--	--	--	--	--	--	--	--
Advisory Services	646	470	21	491	138	4	142	8	5	13
Scientific visit to farmers field	318	2741	65	2806	450	25	475	603	32	635
Farmers visit to KVK	1937	1478	286	1764	109	28	137	28	8	36
Diagnostic visits	37	104	35	139	95	10	105	72	18	90
Exposure visits	02	59	0	59	3	0	3	--	--	--
Ex-trainees Sammelan	--	--	--	--	--	--	--	--	--	--
Soil health Camp	06	223 soil samples collected (216 farmers & 18 extension personnel participated)								
Animal Health Camp	02	185 animals treated (123 farmers benefitted)								
Agri mobile clinic	--	--	--	--	--	--	--	--	--	--
Soil test campaigns	--	--	--	--	--	--	--	--	--	--
Farm Science Club Conveners meet	04	126	1	127	17	0	17	5	0	5
Self Help Group Conveners meetings	--	--	--	--	--	--	--	--	--	--

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
Mahila Mandals Conveners meetings	--	--	--	--	--	--	--	--	--	--
KMAS	52	8027	1326	9353	1418	283	1701	286	30	316
Bi/Tri monthly meeting	8	0	0	0	0	0	0	349	60	409
Celebration of important days										
World Environment Day	1	25	1	26	3	0	3	3	0	3
National Fish Farmers Day	1	98	0	98	9	0	9	0	0	0
International biofuel Day	1	90	30	120	49	16	65	15	3	18
World Honey Bee Day	1	58	6	64	2	0	2	40	0	40
Kisan Mahila Diwas & World Food Day	1	25	10	35	8	2	10	2	3	5
World Fisheries Day	1	46	52	98	13	9	22	3	0	3
Farmers Day	1	58	18	76	18	4	22	45	9	54
World Soil Health Day	1	199	148	347	44	30	74	4	2	6
Parthenium Awareness Week	1	50	2	52	3	0	3	3	4	7
Total	**3330**	**23713**	**6036**	**20396**	**4105**	**1081**	**3485**	**4984**	**741**	**5725**

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)	Ragi	ML- 365	--	3.6 q	9,000-00	6
	Navane	DHFT 1093	-	3.8 q	4,560-00	2
	Bajra	Local	-	0.73 q	2,190-00	1
	Korale	Local	-	2.49 q	7,470-00	1
	Udalu	Local	-	3.42 q	4,140-00	3
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total				**14.04**	**27,360-00**	**13**

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						
	Curry leaf	Local	-	216	4400	07
Vegetable seedlings	Drumstick	KDM-1	-	8757	87570	37
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation	Arecanut	Local	-	8109	202725	21
	Lime	Local	-	54	2700	1
	Coconut	Local	-	1129	101305	57
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				**18265**	**398700**	**121**

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	*Trichoderma*	363	43540	21
Bio Agents				
Others (specify)	Banana Speical	1696	296800	335
Total	**Total**	**2059**	**340360**	**356**

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Milk	HFx, Jersy	10211 L	3,48,874	244
Vermicompost	HFx, Jersy	15188 kg	1,39,485	164
Earthworms	Ubrilous spp	37.6 kg	11280	25
Azolla	Azolla pinneta	25 kg	500	17
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	Guppies, Molly	1448	13,970	03
Others (Pl. specify)				
Total			**5,14,109-00**	**453**

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.): Taralabalu Krishi Sinchana, 1-4-2017, Quarterly, Online addition.

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Short and medium duration varieties of cereals and millets to mitigate monsoon vagaries in rainfed agriculture. *Indian Journal of Ecology* :2017	D.V. Srinivasa Reddy Sreenath Dixit Logarandhan Manjunatha Gowda S. sheela Mallikarjunaa B.O. M. Anitha.	
	Impact of Friends of Coconut Tree trainings conducted by Krishi Vigyan Kendra, Davanagere *Journal of Krishi Vigyan*: 2018	Raghuraja J. Devaraja T.N. Basavnagowda M.G. Prasannakumara N. Sannagoudra H.M.	
Technical reports			
News letters	Taralabalu Krishi Sinchana (Quarterly-online)	Devaraja T.N. Raghuraja J. Basavanagowda M.G. Mallikarjuna B.O. Jayadevappa G.K. Prasannakumara N. Sannagoudra H.M.	

Technical bulletins			
Popular articles	Sasya Poshakamshagalu-Negila Miditha, UAHS. Shivamogga	Sannagoudra H.M.	
	Battadalli Koorige bithane Paddathi Negila Miditha, UAHS. Shivamogga	Mallikarjuna B.O. Devaraja T.N. Srinivasalu	
	Micronutrient Mixture boosts Banana Production. Symbol of success: Pathways to success. Publication by Division of Agricultural Extension, ICAR, New Delhi	Raghurja J. Devaraja T.N. Basavanagowda M.G. Sannagoudra H.M.	
	Anukulakari Hingari Jola, SPV-2217-Negila Miditha, UAHS, Shivamogga	Sannagoudra H.M. Raghurja J. Devaraja T.N.	
	Tomatodalli Calcium Korathe-Negila Miditha, UAHS. Shivamogga	Sannagoudra H.M.	
	Kiboot-Isreal Krishi Yashassina Mooola Negila Miditha, UAHS. Shivamogga	Basavanagowda M.G.	
	Adikeyalli boran Korathe Negila Miditha, UAHS. Shivamogga	Sannagoudra H.M.	
	Bari neeralla-adu jeevajala Negila Miditha, UAHS. Shivamogga	Basavanagowda M.G.	
	Krishiyalli bevu lepitha Urea Nirvahane Negila Miditha, UAHS. Shivamogga	Sannagouddra H.M. Devaraja T.N.	
	Nera Kurige bata bithane—Achakattu Pradesh Varadhana- Janathavani	Mallikarjuna B.O. Devaraja T.N.	
	Badalagabekagiruvudu Krishiyallai Namma raitha buddimathe.	Mallikarjuna B.O.	

	Krishi Kushiya Kudureyaneri-Vijayakarnataka	Devaraja T.N.	
	Baleyalli potassium Korathe-Negila Miditha, UAHS, Shivamogga	Sannagoudra H.M.	
	Mekkejoladalli Zine Korathe-Negila Miditha, UAHS, Shivamogga	Sannagoudra H.M.	
	Kalpavrukshakka bara sidilu-Prajavani	Basavanagowda M.G.	
	Hattiyalli Magnisium Korathe-Negila Miditha, UAHS, Shivamogga	Sannagoudra H.M.	
	Alli yekarege 75 ton; illi 25 ton – Janathavani	Basavanagowda M.G.	
	Baleyalli Kabbina Poshakamsha Korathe-Negila Miditha, UAHS, Shivamogga	Sannagoudra H.M.	
Extension literature	Mannu arogya-Namma arogya	Sannagoudra H.M. Devaraja T.N.	 1000
Edited Book	Innovative Farmers	Raghuraja J. Devaraja T.N.	1000
TOTAL			

10.B. Details of Electronic Media Produced

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

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). : Nil

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

a) WhatsApp group: Started whatsApp group by name 'ICAR-Taralabalu Krishi Vigyan Kendra' which included Krishi Vigyan Kendra and AHRS scientists, Development Department personnel, farmers, NGO activities, company manufacturers among others. Innovative technologies are discussed and farmers problems are addressed immediately.

b) Initiated bi-monthly meeting of 10 active farmers producer company Ltd in the district. The process facilitated exchange of ideas in business. Addressing the problems collectively etc.

c) Saturday Organic Bazaar: Weekly Sandy held at Krishi Vigyan Kendra premises every Saturday helped organic farmers and consumers of organic produce as it is made available next door.

d) Kasa Rasa Abhiyana: Campaign and Demosntration started for Urban bio-waste degradation using microbial culture and use of compost in kitchen garden.

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): Nil

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

10.G. Field activities

i. Number of villages adopted 06 (Doddabbigere, Katenahalli, belludi, Rameshwara, Hallikdere, Parushurampura)
ii. No. of farm families selected : 1933
iii. No. of survey/PRA conducted : 6-Basic information collected trhough surveys and secondary information)

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab **:** Established

1. Year of establishment : 2011 (April)
2. List of equipments purchased with amount

Sl. No.	Name of the Equipment	Qty.	Cost (Rs.)
1	Digital conductivity meter	01	12,860-00
2	Digital pH meter	01	11,033-00
3	Flame photometer	01	48,375-00
4.	Spectrophotometer	01	42,570-00
5.	Macro Block digestion system: KIL 08 L	01	96,212-00
6.	Distillation system KJELO DIST EAS VA	01	1,77,268-00
7.	Digital Burette Titration system	01	53,212-00
8.	Quartz single distillation model with 4 l/h capacity	01	31,482-00
9.	Quartz double distillation unit with 1.5 l/h capacity	01	64,130-00
10.	Hot air oven	01	29,786-00
11.	Hot plate Rectangular	01	6,784-00
12.	Water bath	01	5,724-00
13.	Digital Analytical balance capacity 210 g	01	69,960-00
14.	Table top balance capacity 10 kg	01	6,890-00
15.	Heating mantle capacity 250 ml	01	1,908-00
16.	Kent water purifier	01	16,500-00
Total		**15**	**6,74,694-00**

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samplesanalyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	6024	4894	3084	564581
Water Samples	4652	3448	2995	222850
Plant samples				
Manure samples				
Others (specify)				
Total	**10676**	**8342**	**6079**	**787431**

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	2149	1592	1260	196100
Water Samples	1627	1270	1009	81000
Plant samples				
Manure samples				
Others (specify)				
Total	**3776**	**2862**	**2269**	**277100**

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
5-12-2017	1592	2192	2149	1260	Member of Parliament	Zilla Panchayath Members, Line Department Heads.

10.I. Technology Week celebration during 2017-18: Yes

Period of observing Technology Week: From : 04-12-2017 to 06-12-2017
Total number of farmers visited :870
Total number of agencies involved : 07 (Dept. of Agriculture, Horticulture, AH & VS, Fisheries, IAT, Krishika Samaja and RCF Ltd.)
Number of demonstrations visited by the farmers within KVK campus : 08

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	01	172	Organic Farming –Processing and Marketing Technologies
Lectures organized	2	698	1. Water – Future: More Crop per drop 2. ARYA
Exhibition			
Film show	2	698	-
Fair			
Farm Visit	3	870	Instructional Farm Technology

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Diagnostic Practicals			
Supply of Literature (No.)	3	870	Agriculture Technologies, Development Department Schemes.
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			

10. J. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized

State	Number of camps	No.of animals	No.of farmers
Total			

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Total				

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Total			

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Total												

PART XI. IMPACT

11. A. Impact of KVK activities

1. "AQUAFARMING PROMOTED SUSTAINABLE LIVELIHOOD IN RURAL AREAS OF DAVANAGERE DISTRICT"

Situation Analysis:

Indian farmers have been innovative and persistent in farming for centuries. This has helped Indian agriculture evolve over the years and attain a level of feeding billions of people in the nation. However, recent trends are not encouraging one to continue and stay in farming. Complex, Diverse and risk prone nature of Indian agriculture is popularly known as gambling with monsoon, pose continuous challenges to farming and farmers.

Paddy is an important crop of our district covering 65,000 ha area with the help of Bhadra canal water. Popular paddy varieties used are BPT Sona, IR 20, Jaya, RNR, Kavery sona etc in this region. Cost of production is ranging from Rs. 18,000 to 22,000 per acre. Fertilisers, chemicals, manual labour are the major expenditures. Yield is generally around 20-25 q/acre. Fluctuating market procurement price, emerging pest and diseases and water scarcity have made paddy growers think twice about continuing in paddy farming. Agonised farmers have started looking for alternate farming practices, although DSR is making its entry now. At this dire straits, pond aquaculture of fishes came in as a subsidiary activity where water availability was ensured. We are presenting a case study of one such venture experienced by our KVK in the recent past. Here, farmers who were traditionally growing paddy have come forward to take up fish culture or aquafarming in a big way.

Technology Details:

ICAR-Taralabalu KVK, Davanagere had conducted frontline demonstration on fish culture in earthen ponds at Devarahatti village, Davanagere taluk during 2013-14. There were 4 farmers who had taken part in this programme and underwent few trainings to fine tune their understanding of aquafarming management technologies. Although, these farmers had a background of fish culture in a small way, they needed scientific approach to get better benefits out of the efforts. Scientific rationale underlying the varietal selection, stocking density, water quality monitoring, manuring and natural feed management, supplementary feeding, growth monitoring and marketing aspects were given focus while training the farmers. *Catla catla* (20%), *Labeo rohita* (10%), *Cyprinus carpio* (10%), Pangasius (60%) were the main fish varieties stocked in the ponds with 10,000 fingerlings per acre. These are hardy, easily adaptable, fast growing species and having good market demand. Pest and disease incidences are relatively less, if we maintain good water quality. We had collaborated with department of Fisheries in obtaining subsidy for pond construction and fish nets and also for good quality fish fingerlings.

Yield and output details:

The culture period was 12 months in earthen ponds. Fishes attained an average body weight of 1.5 - 2 kg. The highest yield was 18.2 t/ha and the least was 5.2 t/ac. The average selling price at farm gate was Rs.80/kg with *Catla* fetching the maximum rate and *Pangasius*, the minimum. This was intensive method of aquafarming in inland waters. Farmers were used to get 1-1.5 t/ha of fish yield in village tanks without any supplementary feeding and the cost of production was around Rs.50,000/ha.

Table 1 shows the details of Cost-Benefit equations in fish farming with and without scientific strategies.

Table 1: Economic details of aquafarming as FLD during 2013-14

Sl. No.	Name of the farmer	Area of pond (acre)	Actual Yield (t)	Actual Gross cost (Rs.)	Actual Gross income* (Rs.)	Actual Net profit (Rs.)	C:B
	Control	**2.5**	**1.5**	**50,000**	**1,20,000**	**70,000**	**2.42**
1.	Muzamil Basha	2.5	18.2	2,50,000	14,56,000	12,06,000	5.82
2.	Shamasudin	1.5	9.5	1,40,000	7,60,000	6,20,000	5.43
3.	Maqsood	1.0	7.4	1,00,000	5,92,000	4,92,000	5.92
4.	Suleiman	1.0	5.2	80,000	4,16,000	3,36,000	5.24
	Total of FLD farmers	**6.0**	**40.3**	**5,70,000**	**32,24,000**	**26,54,000**	

* Sale price= Rs.80/kg

Average cost of fish production excluding the pond construction was Rs. 2.38 lakh/ha. The average gross yield was 16.8 t/ha and the gross income per ha was Rs. 13.4 lakh. Therefore, the average net profit was Rs. 11.05 lakh/ha (5.6 C:B). We are not considering the cost of pond construction here since it was covered by government subsidy. This was just in the first year of our demonstration. What later followed was interesting as the farmers became assured of the returns, the time and energy being invested in aquafarming found a steep increase. We have presented here only one year's details but kept monitoring the growth of these farmers. Their production, productivity and income have steadily increased, with Mr. Muzamil harvesting nearly 40 t fish in 2016-17 using intermittent harvest and stocking strategy.

Income and development:

Major cost was for feeding materials and fish fingerlings. These farmers were innovative in their approach with the moral and technical back stopping by KVK. They explored many possibilities to reduce the cost of feed. They tried puffed rice, pounded rice, chicken wastes, food left over from hotels, hostels, temples, schools, marriage halls besides rice bran and groundnut oil cake. Conventional RB and GOC prices have been increasing gradually which act as a deterrent factor for fish farmers. Regular manuring with cow dung and poultry manure was in practice. Indigenously, these farmers were oriented to fish culture and their mind works very fast in managing any issue related to fish culture. They didn't get inhibited by any challenges. They kept trying various strategies in feeding, water supply and marketing. They were getting water from canal along with borewell for supplementary support. Fortunately, they didn't face any water crisis during the culture period.

Farmers have marketed the fishes intelligently to gain better edge over the other crops. Although, fish is a highly perishable commodity, it is to our advantage as long as it is inside the pond water. Fish in tank is like money in bank. They have learnt to negotiate better and get a good and fair price from the market. Another strategy applied by them was to harvest as and when required by an order and stock adequate number of fingerlings to balance the total fish in the pond. This intermittent harvest and stocking has saved them lot of time, energy and cost besides earning profits.

Farmers in Devarahatti village have taken up fish culture as a serious career option and started to invest in the expansion of the activity. Three of them have constructed additional mini ponds adjacent to the big ponds to act as rearing ponds. They bring in large number of fingerlings and rear them in small ponds for a shorter period, say around 2 months and then release them into bigger ponds. This practice is popular in Andhra Pradesh. Exposure visit of farmers to that region through department of fisheries has helped them to recognise the significance of this arrangement. This strategy helps the farmers to get better survival of fishes in big ponds and also attain bigger size in relatively shorter period of time. If we want to grow marketable size of fish in 4 months like paddy or maize, then we should stock fish of bigger size, say of 100 g body weight each. Stunted fingerlings are the quick answer for this demand.

Impact and recognition:

Water use efficiency has increased with fish culture instead of paddy production in this village. According to a scientific report, 1 kg paddy requires 5000 liters of water whereas 1 kg fish can be produced using 800 liters of water. Aquafarmed water can be used for agri/horticulture crops as an enriched liquid. **The area of fish culture was zero in the village when we started and now it has increased to 20 acres with 9 farmers. Similarly, it was 5 acres in the district 10 years ago and now, 150 acres.** This is due to the continued and sustained income generation being possible in aquafarming. These farmers have become resource persons for many trainings, exposure visits to their farms and in sharing experiences with fresh enthusiasts. One of them has been awarded state and district level best fish farmer awards by KVAFSU, Bidar and UAHS, Shivamogga. KVK has felicitated all these innovative and daring farmers during Kisan Samman Diwas, 2015. Mr Muzamil has built a new house and bought a 4 wheeler (Omni van). Mr Shamsuddin bought an Omni van, an autorickshaw and renovated his house. Their social status has improved and way of looking at life has changed. They are representative of positive growth in the village. They have indirectly inspired many youth in their village and also surrounding ones. **Now, we have Mr.Dilyappa in Kundawada, Mr. Basavanagowda in Jigali, Mr. Pawan in Chikkasandi, Mr. Chaman in Nittur** who have met farmers of Devarahatti at least once before starting their own venture.

Doubling the farmers' income by 2022 is a worthy dream. We realise that mere yield and revenue doubling for once is not the aim but generating a continued and sustainable livelihood is the focus. Our KVK is trying its best to attract, retain youth and general farmers in agriculture and find it a better option to live a comfortable, respectable life. We believe that prestige, profit and partnership for farmers is the need of the hour.

2. Integrated management of Dairy Animals for better performance

1. **Situation Analysis / Problem statement**: The Livestock in Davanagere District of Karnataka State are mainly dependent on poor quality dry roughages available after harvesting and threshing of agricultural crops especially maize, paddy finger millets, pigeon pea, horse gram, jowar etc. The Livestock population in the district comprised of 5 lakh cattle, both local & crossbred, 2 lakh buffalos, 3 lakh sheep, & goat with low production potentiality. The livestock owners were meeting their fodder requirements through a combination of dry fodders obtained after harvesting and threshing of agricultural crops and through cultivation of one or two forage crops especially Napier crosses. This was not sufficient to meet the nutritional requirements of the animals as per National Research Council Standards both in terms of quantity and quality. However, meeting the animal's requirements based on their production levels through either green or dry forages is very crucial to livelihood of farmers in the low rainfall areas. Even though the crossbred cows have good potentiality to produce more than 10 l milk per day, farmers could not exploit their full potentiality mainly due to under-nutrition/malnutrition. Practicing Farmers in the villages have not made any special efforts to cultivate forages and maintain pastures. This led to severe fodder crisis in the villages which results in production losses, ultimately forced distress sale of valuable animals and causing economic loss to farmers.

2. **Technology and Activity details**: The livestock in the District especially dairy animals were suffering from severe shortage of green fodders .The farmers were growing only Napier fodder varieties during Kharif to feed their animals which were not sufficient to meet the animals nutritional requirements. After assessing the ground reality in the Kambathahalli Block comprising of 6 villages in Harapanahalli Taluk we, have made an effort through KVK and demonstrated the feeding of milch animals based on NRC standards. Technical support and guidance for feeding milch animals based on their body weight, milk production, physiological status of the animal and cultivation of good quality fodders, their nutritive values & feeding principles (feeding leguminous& non-leguminous fodders and compounded feeds with mineral supplements) were provided to ten farmers in the selected block through trainings and method demonstration.

Kambathahalli village block comprising of 6 villages of Harapanahalli Taluk was selected for the Feeding trials after conducting the survey. Crossbred cattle especially milch cows yielding less milk and having infertility/repeat breeding problems were selected for demonstration. After assessing the problem KVK has made an effort to educate the practicing farmers about balanced feeding of milch animals (as per NRC standards) at lower cost. Ten milch crossbred cows were selected for the Demo and are provided with balanced nutrition for 60 days in 2013-14 and 2015-16. Farmers were encouraged to grow good quality fodder crops and to use them in right combination with compounded feed. Before start of feeding trial all the animals were dewormed to avoid any ill effect caused by worms. During the study period milk yield and its quality were recorded along with incidence of mastitis. Also, the scientific byre management was taken care to provide clean and quality milk production.

3. Output details: The feeding trial with 10 milch crossbred cows of Kambathahalli block conducted in the form of frontline demonstration. All the animals were provided with balanced nutrition during the feeding trial and the observations were recorded as below:

Feeding trial conducted in 2013-14					
Name of the farmer	**No. of animal**	**Milk yield in 60 days (l)**	**Milk yield / lactation (l)**	**Lactometer reading**	**Incidence of mastitis**
Nagaratnamma, Kambathahalli	HF-Jr x cow-1	984.8	4823.0	1.028	Nil
Basavaraj patil, Nandikamba	HF x cow-1	573.7	2916.3	1.029	Nil
Chandrashekharappa.B Elebethur	HF x cow-1	611.6	3109.0	1.030	Nil
Rudresh.C, Ucchangidurga	HF x cow-1	357.5	1817.3	1.030	nil
Jayamma, Kuremaganahalli	HF x cow-1	1006.9	5118.4	1.028	Nil
Average Milk production	**-**	**706.9**	**3593.4**	**1.029**	**-**
Feeding trial conducted in 2015-16					
Name of the farmer	**No. of animal**	**Milk yield in 60 days (l)**	**Milk yield / lactation (l)**	**Lactometer reading**	**Incidence of mastitis**
Maheswarappa.B, Kuremaganahalli	HF- x cow-1	522.3	2655.0	1.026	Nil
Yathiraj.B.H, Kuremaganahalli	HF x cow-1	502.2	2553.0	1.027	Nil
Vijayakumar.N.S, Kuremaganahalli	HF x cow-1	593.2	3015.0	1.026	Nil
Marulasiddappa.K.S, Kuremaganahalli	HF x cow-1	505.8	2571.0	1.028	Nil
Prakash.K.S, Kuremaganahalli	Jr x cow-1	607.4	3088.0	1.029	Nil
Average Milk Production	**-**	**546.0**	**2776.0**	**1.027**	**-**

4. Income/Profit and development: The milk yield obtained during the demo period was converted in to lactation yield and yield recorded is more than 20 % of the previous lactation. When the net income is taken in to account it is almost double compared to the control animals in the same lactation. The details of the milk production, productivity gross cost, gross returns and cost benefit ratio are given below

2013-14						
Treatment	**No of animals**	**Breed**	**Total milk production**	**Gross cost**	**Gross returns**	**Cost Benefit Ratio**
Farmer's practice	5	HF x	2637.0	32,635.00	52,735.00	1.61
Improved practice	5	HFx	3593.4	34,678.50	71,868.00	2.07
2015-16						
Treatment	**No of animals**	**Breed**	**Total milk production**	**Gross cost**	**Gross returns**	**Cost Benefit Ratio**
Farmer's practice	2	HF x	1586.0	35,389.0	39,650.00	1.12
Improved practice	5	HFx	2943.3	35,685.0	73582.5.00	2.06

After feeding the dairy animals with balanced ration there is a significant improvement in milk yield (18-30 %) and the quality (CLR & Milk fat). Cost of feeding animals was reduced by 10-15 %. Many farmers in the village have started adopting the technologies by providing the compounded cattle feed along with mineral supplements. However, economical and the potential yield from the animals could not be obtained due to the scarcity of leguminous fodders in the village.

Livestock farmers, other than those who are not in the Demo have shown interest in adopting the technologies like providing balanced ration and production of clean and quality milk. Before the KVK intervention the awareness on use of compounded feeds, mineral supplements, and clean milk produced in the village was very less. In general the crossbred cattle population had increased in the village and more number of farmers have started cultivating perennial fodders and feeding their animals based on NRC standards.

Extent of spread/adoption/scaling up of interventions year wise

	Before KVK intervention	**2014**	**2015**	**2016**	**2017**	Farmers have picked up the knowledge on the importance of balanced nutrition in crossbred dairy animals.
Area under the interventions (No of animals)	Nil	5	12	22	31	
No. of farmers adopted	Nil	5	12	16	23	

CONCLUSION: Feeding crossbred dairy animals as per National Research Council recommendations i.e; feeding based on the requirements help in exploiting the full production potentiality of the animals. Just by adopting these technology farmers net income can be doubled.

3. Enhanced Farmer Income and the Soil Fertility through Paddy-Blackgram Cropping System in Upper Tunga Irrigation Command Area of Davanagere District

Situation analysis/Problem statement

Upper tunga project covers 5976 ha and 593 ha cultivated area in Honnali and Harihara taluk of davanagere district, respectively. Paddy is the major crop in this area in Kharif. In summer most of the farmers go for cultivating paddy under bore well facility and some farmers grow maize, sorghum and other minor millets and some area remain kept fallow.

Continuous mono cropping since 10-12 year lead to deterioration in quality of the soil is seen in this area. The productivity of the rice is decreasing year after year whereas the consumption of chemical fertilizers is going up. Less utilization of organic manures, inappropriate fertilizer management, injudicious use of water, intensive farming etc are the associated causes for low productivity.

Technology details

Growing pulse after cereal crop is well known practice in maintaining soil health. Black gram is the short duration (<90 days), less water requiring variety suitable for cultivating in summer season (Jan-April). ICAR- Taralabalu KVK had taken demonstration on blackgram production under NFSM project at four cluster villages namely Bijogatti, Kuruva, Govinakovi and Haralahalli of Honnali taluk, Davangere district in view of improving soil fertility and to generate additional income to the farmers. Demonstrated with 25 farmers in 10 hectare area in collaboration with Department of Agriculture. A new variety DBGV-5 was introduced to farmers with required improved production technologies.

In order to achieve higher productivity, trainings and method demonstrations were organised by KVK at different stages of crop. To encourage farmers, critical inputs like seeds, water soluble fertilizers and need based agrochemicals were also provided.

Yield and Output

The new variety performed moderately well in water stress conditions. Yield data of all the farmers is given in the table below. The average yield of 5.67 q/ha was recorded in demonstrated plots.

Blackgram cultivation not only provided extra income but also helped farmers enrich soil nutrition. They need not raise legumes in summer before ploughing for raising paddy. After the pulses were harvested, the crop residues decompose and increase the organic carbon and nitrogen content in soil. When grow paddy is grown, the nutrient-rich soil will enhance the yield during the next season.

Income/ Profit and development

With little expenses, the farmers got net income of Rs.23000/- per hectare. Rice-Blackgram cropping system was a source of additional income to farmers and it also helped in maintaining good soil fertility.

Table 1. Yield obtained and economics of blackgram after the paddy in tunga command area of Davanagere district

Sl. No.	Name of Farmer	Village	Yield (q/ha)	Net returns (Rs./ha)	BCR
1	B. M. Hucchappareddi	Bijogatte	6.47	28202	2.94
2	B. M. Thimmappareddi	Bijogatte	5.74	23384	2.61
3	Basavarajappa	Bijogatte	5.95	24770	2.71
4	B. G. Rajappareddi	Bijogatte	6.57	28862	2.99
5	Veereshappa	Bijogatte	6.23	26618	2.84
6	B. M.	Bijogatte	6.11	25826	2.78
7	B. R. Shivappa	Bijogatte	6.18	26288	2.81
8	K. R. Basavaraj	Kuruva	6.64	29324	3.02
9	K. L. Siddesh	Kuruva	4.53	15398	2.06
10	K. R. Devaraj	Kuruva	3.68	9788	1.68
11	Basavanneppa	Haralahalli	6.47	28202	2.94
12	Maheshwarappa	Haralahalli	5.14	19424	2.34
13	Parameshwarappa	Haralahalli	5.86	24176	2.67
14	B. G. Maheshwarappa	Bijogatte	6.47	28202	2.94

15	B. G. Shanmukappa	Bijogatte	6.53	28598	2.97
16	B. G. Jeevareddi	Bijogatte	3.69	9854	1.68
17	Murugesh	Kuruva	5.5	21800	2.50
18	Umesh	Govinakovi	4.77	16982	2.17
19	B. G. Basavaraj (2)	Bijogatte	6.6	29060	3.00
20	Palakshappa	Bijogatte	5.02	18632	2.28
21	Mahesh B. C	Bijogatte	4.05	12230	1.84
22	Manjappa	Bijogatte	6.57	28862	2.99
23	Umesh	Kuruva	4.41	14606	2.01
24	Mahesh G. B.	Bijogatte	5.74	23384	2.61
25	ICAR- Taralabalu KVK	Davanagere	6.71	29786	3.05
	Average		**5.67**	**22890**	**2.58**

4. MECHANISATION IN RICE TRANSPLANTING – A tool to increase the production and productivity and doubling the farmers income

Scenario of the Disrtict

Rice is one of the most important staple food for more than 50 percent population of the world It is cultivated in 113 countries ,. About 90 percent rice area exists in Asia. Rice is the major crop of the Davangere district covering an area of 2.0 lakh hectare.

The increase in the cost of production and due to non availability of the skilled labourers for transplanting and shifting of the field labourers to the near by urban cities for other than agriculture work is main reason for the reduction in the area. The major problems faced by the rice farmers is untimely transplanting. The Krishi vigyana Kendra, davanagere through the Frontline demonstration introduced the mechanical tranplanters for transplanting of rice. The main objective of this study is to reduce the cost of production on transplanting and increase the production. Through mechanical transplanting of rice, we can save 10-15 percent of water

Technology and Activity details

ICAR-Taralabalu KVK, Davanagere in collaboration with KUBOTA and Department of Agriculture, interacted with farmers and conducted a training cum demonstration program on mechanized transplanting. one hundred and fifty farmers participated in the programme. There are two types of transplanters, one is Riding type and another is walk behind. Riding type with six row planter cost about ten lakh and its capacity is 8 acres of area can be transplanted with two labors . It consumes one liter of petrol/acre and timely planting can be done. This is for the big farmers whose land holding is more than 20 acres. The seedlings were raised in the portrays (200 trays/ha) and 23 days old seedling are suitable for mechanized transplanting

Conducted Frontline Demonstration(FLD) during the year 2011-12 in 15 acres of area in Jigli, Harihara taluk. During the year 2012-13, conducted the FLD with walk behind with four rows transplanter cost about 2.5 lakhs and its capacity is 4 acres of area can be transplanted with two labourers and consumes one liter of petrol/acre. The main technologies followed in mechanized transplanting were raising of the nursery in portray, use of cono weeder for weeding.

Out Put details :

The demonstration(Machine transplanted) was conducted for the last 3 years with 50 farmers and the results were as follows the Cost of production **Rs. 33,460, Rs. 44,300 and Rs.41,250 per ha** and yield was **61.25, 55.17 and 58.5** q/ha (2012, 2013, 2014) respectively. Ojha and Kwatra(2014) found that the economic cost of mechanized transplanting was Rs 3557/ha, which is 47% less than conventional method. In the farmers field (Manual transplanted (Check)), the cost of production of Rs.37,250, Rs 49,650 and Rs 49,300 per ha and yield of 55.75, 49.55 and 56 q/ha (2012-13, 2013-14, 2014-15) respectively. In demonstration plot recorded the net profit of **Rs. 55,353, Rs.38,455 and Rs.46,500 per/ha with B:C ratio of 2.65, 1.86 and 2.12** (2012, 2013 and 2014-15) respectively when compared to Rs. 43,587, Rs. 24,675 and 34,700 per ha with Benefit cost ratio of 2.17, 1.49 and 1.70 (2012, 2013, 2014) respectively in check plot. The results were shown in table 1.

Table 1: Economics of demonstration over check plot

Year	Yield q/ha		Cost of production Rs/ha		Net return (Rs/ha		B:C
	Demo	Check	Demo	Check	Demo	Check	
2011-12	61.25	55.75	33460-00	37250-00	55353-00	43587-00	2.17
2012-13	55.17	49.55	44,300-00	49250-00	38455-00	24675-00	1.49
2013-14	58.50	56.00	41,250-00	49300-00	46500-00	34700-00	1.70

In demonstration plot, the reduction in cost of the production is mainly due to use of machines for the transplanting, seed rate 20 kg/ha and reduction in weeding cost against the manual transplanted check plots. The increased yield in demonstration plot is mainly due to proper spacing, more number of productive tillers/sqm, weeding through conoweeder and less incidence of pest and diseases against the check plot. The detailed observation recorded were shown in table 2.

Table 2: Observation recorded in demonstration plot over check plot

Parameters	**Demonstration (mechanical transplanted)**	**Check (Manual transplanted)**
Seed rate (kg/ha)	20	62.5
Germination of seeds	95	90
No. of hill/sqm	18-22	25-30
Tillers/hill	41.9	29.0
Labour requirement Transplanting	4.No /ha (8 hour)	15 No/ha (16 hour)
Labour requirement weeding	2.No/ha (16 hours)	10 No./ha (16 hours)

Impact of the demonstration

Mechanization of paddy transplanting is need of the hour due to decreasing availability of the labour and shortened time span for transplanting. But high cost of machines can be overcome through the purchase of these by cooperatives and custom hiring. The operators of the machine should be properly trained. Farmer also required a good training in raising nursery in pro trays as this is very important.

In collaboration with Department of Agriculture, Davanagere, the farmers now own eight riding type and five walk behind transplanting machines. Training programmes, demonstrations, field days and campaigns have made the farmers to go for mechanization and the area under mechanized transplanting is increasing year by year(500 ha). The information collected from farmers by different extension methods clearly indicates that mechanization in rice is *the need of hour*.

5. Sunflower -best Alternative crop for Maize in rainfed areas

Situation Analysis/problem statement

Maize is an important crop of the district and cultivated in an area of around one lakh ha. Sunflower is also an important oilseed crop of the district. But due to the maize crop, sunflower area had been reduced. From last three years (2014-17) , monsoon is playing with farmers and many farmers incurred huge loss by growing the maize. Even some farmers lost the whole crop and could not get their cost incurred.

Problems of Maize farmers

- Low yield
- Incidence of stem borer
- Sever incidence of army worm

- Irratic rainfall
- Long duration hybrids

Farmers during the interaction with scientists and department officers at time of Kharif campaign, urged that suggest the best suitable alternate crop for the Maize.

Intervention with Technology and Activity Details

ICAR-TKVK and Department of Agriculture jointly conducted the training program and awareness campaign on the change the cropping pattern suitable for the rainfed areas in Myduru and Yellepaura in Harpanahalli taluk. Discussion with farmers on the crops grown earlier in these areas, we analyzed the situation and decided to go for sunflower as an alternate for the maize crop.

Planning

Conducted the frontline demonstration on the complete package and practices in Sunflower for the farmers in an area of 65 ha in Myduru and 50 ha Yellapura. The following are the technologies under Integrated Crop management

1. Seed treatment with trichoderma @ 4g/kg of seed
2. Spraying with water soluble fertilizers (KNO3) @ 5g/l of water at grand growth
3. Sucking pest management – Neem oil @ 2m/l and Acetamapride 1g/l of water
4. Spraying of Micro nutrient (Boron) and growth regulator – 5ml/l of water
5. Management of leaf spot – Mancozeb @ 1g/l of water

Capacity Building programmes:

Conducted the training program and method demonstration to the farmers on different technologies used in the crop production at relevant stages of the crop at Myduru and Yellapura.

Table:1 Training details

Date	Title of training programme	Participants
30-06- 2016	Importance of water soluble fertilsers (19 all) and management of bud necrosis at early stage	45
11-07-2016	Integrated weed management and sucking pest management in sunflower	86
08-08-2016	Integrated Pest and disease management Importance of micronutrient in improving sunflower yield	38
18-07-2017	Management of leaf spot in sunflower	20
31-07-2017	Integrated weed management and Nutrient Management in sunflower	35
05-09-2017	Importance of micronutrient (Boron) in getting higher yield sunflower	45

Out Put Details:

During the year 2016-17 the ICM in Sunflower demonstration with 65 farmers at Myduru and. the economics of the demonstration was the Cost of production **Rs. 27,393, Gross return of Rs. 72063 and Net returns of Rs.41,250 per ha with the** yield of 16.5 q/ha as against the Maize crop with Cost of production **Rs38,500, Gross return of Rs. 45,525 and Net returns of Rs.4025 per ha with the** yield of 31.5 q/ha.

During the year 2017-18 the ICM in Sunflower demonstration with 50 farmers at Yellapura. the economics of the demonstration was the Cost of production **Rs. 27,393, Gross return of Rs. 72063 and Net returns of Rs.41,250 per ha with the** yield of 16.5 q/ha as against the Maize crop with Cost of production **Rs38,500, Gross return of Rs. 45,525 and Net returns of Rs.4025 per ha with the** yield of 31.5 q/ha.

Table 2: Economics of the Sunflower and Maize crops grown under rainfed conditions

Year and Village	Crop	Yield (q/ha)	Gross Cost (Rs/ ha)	Gross return (Rs/ ha)	Net Return (Rs/ha)	B:C ratio
2016 - **Myduru** **Price** Maize-1350/q Sunflower-4368/q	Maize (Check)	**31.5**	**38,500**	**42525**	**4025**	**1.10**
	Sunflower (Demo)	**16.5**	**27,393**	**72063**	**44671**	**2.63**
2017 - Yellapura **Price** Maize-1250/q Sunflower-2750/q	Maize (Check)	**17.5**	**30,000**	**21,000**	**-9000**	**-**
	Sunflower (Demo)	**15.35**	**22714**	**42212**	**19498**	**1.85**

The fluctuation price of the sunflower had reduced the net returns of the farmers . The proice of sunflower was 4500- 4800 during the year 2016-17 had drastically reduced to 2500-3000/q during the year 2017-18

6. Production of Vermicelli for Self Employment

Introduction

Smt. Mangalamma, (45 years) Halebislari village, Davanagere taluk and district returned her to her parents home after unfortunately become widow. Her brother who has 2 acres of land, find it extremely difficult lead minimum standard of living and his sister's return to home only increased their problem. They were working as daily wage workers on many occasions for their earnings. ICAR-Taralabalu KVK, Davanagere adopted Halebislari village from 2009 to 2012 and introduced need based agricultural technologies and also implemented 3 year project on 'Rural livelihood security through technological interventions' sponsored by Department of Bio-Technology, New Delhi (2009-2012). KVK identified Smt. Mangalamma and understood her situation and helped her to become rural entrepreneur.

KVK interventions

KVK identified this woman and established 'Vermicelli Production Unit' sponsored by Department of Bio-Technology, New Delhi. The cost of vermicelli production unit was 34,000-/ during 2009. The KVK intervened in the following areas;

- **Training and Demonstrations**:
  Smt. Mangalamma was provided necessary training to become entrepreneur in general and technicalities to produce vermicelli in general. In the training, raw materials required for vermicelli production, ingredients and method demonstration on preparation of vermicelli were imparted. Subsequently, specialists from KVK visited the enterprise site for regular monitoring and guidance.

- **Publicity and marketing:** Specialist of KVK have used every opportunity to promote marketing of vermicelli produced by Smt. Mangalamma from Halebislari village in the group meetings, trainings in and around the village (5 villagers regularly purchased). Opportunity has been provided in KVK organized exhibitions for the sale of vermicelli like during Agricultural Technology Week, seminars/workshop where in large number of farmers used to gather. In the initial periods vermicelli was sold to villagers of Halebilsari. Subsequently, nearby villagers also started to purchase vermicelli from Smt. Mangalamma for house hold consumption owing to the efforts of KVK specialists in spreading the information.

Technical components of the enterprise

- **Raw materials:** Raw material for production of vermicelli is Rava, which is readily available in Davanagere city which is 13 km away from the village.
- **Manpower involvement:** Smt. Mangalamma along with her brother takes up production of vermicelli on a regular basis and no outside labour is involved in this process.
- **Package and handling:** 1 kg carton boxes are used to pack the vermicelli. This package is used because majority of purchasers are household people and it is easy to carry. Since the production is continuous and available in the village itself, people like to buy in small quantities.

Economics of the Enterprise

The unit on an average produces 500 kg vermicelli in month. In the summer months, the production goes up to 650 kg/month. The average cost of production of vermicelli including raw materials, labour, electricity, packing and marketing among others comes to Rs. 39/kg. The selling price of the vermicelli is Rs. 50/kg., and earns average Rs.5500/month. Smt. Mangalamma is involved in production process regularly along with other house hold activities and her brother occasionally involve in transportation and marketing aspects.

Table 1: Cast benefits of vermicelli production unit

Sl. No.	Particulars	Units
1	Average monthly production of vermicelli	500 kg
2	Average cost of raw materials, labour, electricity, packing and marketing, etc.	Rs. 39/kg
3	Selling price	Rs. 50/kg
4	Average monthly net income	Rs. 5500

Status of entrepreneur before and after the enterprise

Smt. Mangalamma, a widow from Halebislari village of Davanager district settled in this village with brothers after the death of her husband. She inherited 1 acre land from her husband's family. The women was struggling to earn basic livelihood security with almost no resources with her. KVK with the financial assistance of Department of Biotechnology, GoI provided her the vermicelli production machine. This became great opportunity for this woman to engage in work which has given the status of self employed woman in the village. Presently, Smt. Mangalamma enjoys the status of self-employed woman with an improved social status and a motivational spirit for other women in the village. In the age of Multi-National Companies, survival of small enterprise in rural area itself is an achievement and KVK all along supported Smt. Mangalamma in this venture. On the other hand with no sustained income to support herself earlier, now earning Rs. 5,500/ month along with self satisfaction is a positive development for the individual farm family. This effort by Smt. Mangalamma has supported her brother in their farming activities as well.

Recognition for the entrepreneur

Smt. Mangalamma for her rural women entrepreneurship work was recognized by Davanagere University, Davanagere on the occasion of 2 day National Seminar on 'Rural Women Entrepreneurship in India' held during 09-10 November, 2013.

11.B. Cases of large scale adoption

Title: Banana Special: Spread and impact in Davanagere district:

1. Situation:

Banana being on important fruit crop of the district, and production area is continuously increasing due to Comprehensive Horticulture Development Programme (CHD) and other schemes. However, productivity (16.29 ton/ha) was still not near to potential. Pest and diseases incidence, nutritional deficiencies had become serious threats. Fruit cracking due to nutritional deficiencies is rampant.

2. Plan, Implementation and Support:

To address the identified problems ICAR-Krishi Vigyan Kendra in collaboration with department of Horticulture planned few strategic interventions to tackle the situation. They were frontline demonstrations, on farm trials, trainings, method demonstration, field day etc. Villages selected for CHD implementation were indentified for demonstrations, Orientation and regular trainings were planned and implemented. Banana special, a key critical input to mitigate nutritional issues came in very handy. It was the technology from ICAR-Indian Institute of Horticulture Research (IIHR), Hesaraghatta, Benglauru. KVK bought this technology and started producing the mixture at farm level with quality standards.

Farmers were informed about Banana special and its benefits. Department of Horticulture gave full support to Krishi Vigyan Kendra and its interactions. Field results had evidently shown the role of Banana special in enhancing the productivity and production. Newspaper, TV/Radio, magazine/articles, ICAR- Agricultural Technology Application Research Institute, Benglauru publications acknowledged the significance of Banana special. Repeated users and new users were the indicators of product's success.

3. Out Put:

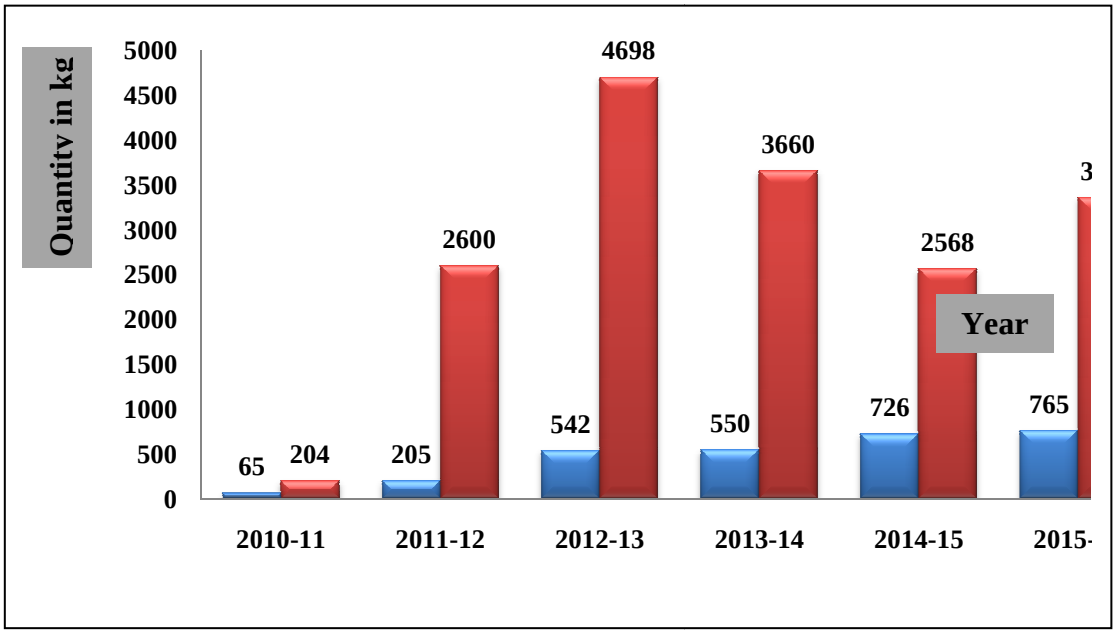
ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere, had undertaken frontline demonstrations on foliar application of Banana special and the spray schedule was 6 sprays at 5^{th}, 6^{th}, 7^{th}, and 8^{th}, month after planting. The fifth spray on emergence of bunch and sixth spray one month after bunch emergence. The spray concentration is 5 g/L and for better results of spray, one shampoo sachet and one lemon liquid should be mixed in 20 L of spray solution.

Table 1: Details of Frontline Demonstrations on Banana special.

Sl. No.	Year	No. of farmers	Area (ha.)	Variety	Demonstration		Check		% on increase in yield
					Yield (t/ha)	B:C Ratio	Yield (t/ha)	B:C Ratio	
1	2008-09	5	1	Yelakki	28.66	2.10	22.25	1.83	28.80
2	2009-10	6	4	Grandnaine	53.39	2.65	40.01	2.27	33.44
3	2009-10	6	4	Yelakki	22.59	2.67	16.22	2.31	39.27
4	2010-11	11	4	Yelakki	17.08	2.3	10.72	1.64	59.32
5	2011-12	10	4	Grandnaine	61.80	2.97	48.38	2.48	27.74
6	2012-13 (FFS)	25	0.4	Yelakki	21.0	3.69	16.4	2.78	28.04
Total		**63**	**17.4**						

The year wise results of frontline demonstration show a significant increase in yield levels of Banana (In both yelakki and Grandnaine varieties) compared to check plots. The horizontal spread of technology can be seen through table-2 where in during 2010-11 (first year of banana special production in KVK) only 65 farmers used the technology while in 6th year, in 2015-16 it spread to 765 farmers. Among the Banana special users, there are repeat users as well as new users every year owing to benefits derived through the use of Banana special.

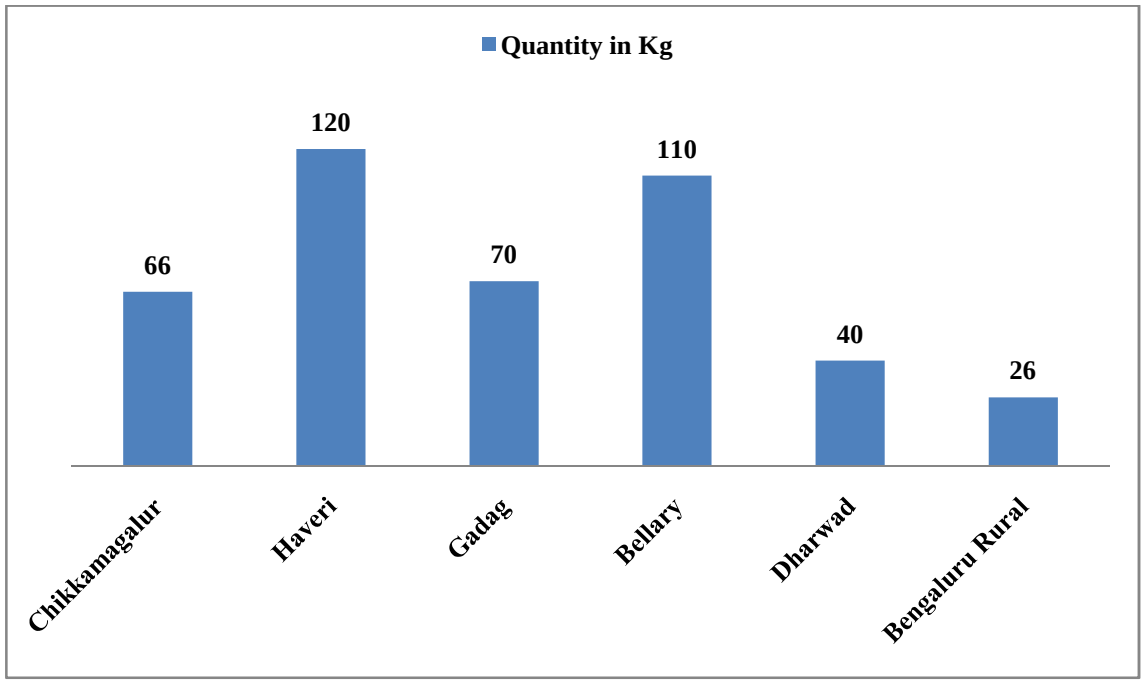
Fig 1: Year wise Supply of Banana special by KVK



4. Out come:

Banana growers in and around the districts have utilized this technology and gave positive feed back on the same. The KVKs from neighbouring districts namely Chikkamagalur, Haveri, Gadag, Bellary, Dharwad and Bengaluru Rural Districts purchased banana special and distributed to farmers. This technology was published in newspaper articles, farm magazines and broadcasted in Radio and Television programmes. Krishi Vigyan Kendra has taken up comprehensive technologies related to the improvement of production and productivity in Banana as 'Flagship Programme'.

Fig-2: Banana Special Supplied to Different Districts in Karnataka



Following 2 cases reveal impact of banana special at farmers level:

1. Mr. Lakshmikanth of Chikkadevarahalli village of Channagiri taluk who adopted Banana special technology during 2011-12 in Grandnaine and yelakki varieties realized 13.38 t/ha. and 6.28 t/ha average yield and corresponding net income was Rs. 93,360/ ha. and Rs. 94,200/ha., respectively.

2. Mr. Gopal Naik of Basavapatna village in Channagiri taluk adopted this technology in 3.6 ha. (yelakki variety). The average yield was 13.88 t/ha and sold at Rs. 50/kg. The gross return was Rs. 25,00,000/- (net return Rs. 15,00,000). Krishi Vigyan Kendra in collaboration with Department of Horticulture and University of Agricultural and Horticultural sciences, Shivamogga had organized the Field Day in this farm to popularize technology on 01-07-2016.

Other realized indirect benefits of Banana Speical usage are as follows:

- **Reduced cost of cultivation:** Due to proper nutrient management through spraying of Banana special, farmers can reduce the quantity of other fertilizers (about 10%).
- **Increased Nutrient Use Efficiency:** Spraying of banana special can increase the uptake of other externally applied fertilizers (about 14% enhanced nutrient use efficiency was observed in frontline demonstration plots.
- **Reduced pests and diseases:** By providing proper nutrition especially micronutrient can increase resistance to pest and disease in plant system (Graham & Webb, 1991).
- **Good quality fruits:** Providing micronutrient through banana special farmers can get good quality fruits (increased bunches with uniform size of fingers) which fetches more price in market. Fruits shelf life will also increase, increased bunch weight and reduced fruit croacking.
- **Higher Total soluble sugar (TSS) content in the fruits:** Magnesium is also one of the component in Banana special and it is also a main component in chlorophyll. The increased photosynthesis in plants by providing Mg ultimately leads to higher total soluble sugar in fruits.

5. Impact:

In the Arkere cluster of Honnali taluk in Davanagere district formed banana growers group comprising of 120 farmers under comprehensive Horticulture Development programme (CHDP). Each member of the group used banana special technology and formation of group helped them to realize better prices in market by avoiding middlemen.

Frontline Demonstrations on Foliar application of banana special in Siddanuru village of Davanagere taluk resulted in formation of ‘Siddanur Banana growers Association’ in order to help themselves in production and marketing of banana. The group consists of 15 members having 25 ha. banana recorded 12 % increase in yield. Additional income realized became the initial investment for the pomegranate crop which was introduced in the village subsequently.

Reference:

1. Annual reports, 2015-16, Department of Horticulture, Davanagere.
2. Annual reports, 2008 to 2016, ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere.
3. Graham D.R and Webb M.J., 1991, Micronutrients and disease resistance and tolerance in plants in: Mortvedt j.J., Cox F.R. Shuman L.M., Ulelch R.M. (Eds), Micronutrients in agriculture, 2nd Edtition, *Soil Science Society of America*, Inc. Madison, Wisconsin, USA.329-370
4. Outscaling of Agricultural Technologies – Experiences of Krishi Vigyan Kendras-IIHR special, 2013, Krishi Vigyan Kendra-MYRADA, Erode.14-15.

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

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
National Innovation Foundation-India, Ahmadabad	Farm Trials on Rice
UAHS, Shivamogga	Technologies, Trainings, Farm trials
IIHR, Bengaluru	Technologies
UAS (Bengaluru), UAS- (Dharwad), UAS (Raichur), KUAFSU (Bengaluru), UHS (Bagalkot)	Technoogies
Department of Agriculture, Horticulture, AH & VS	Trainings, Field visits
Dept. of Animal Husbandry and Veterinary Science, Davanagere	Conducting Animal Health Camps and Extension Functionaries Training Programme.
Techno Serve, Davanagere	Conducting animal health Camps, Training programmes and Method Demonstration.
KWDP-II Sujala III, Department of Horticulture	Diagnostic field visits, Trainings.
Farmers Producer Company Ltd	Interactive meetings, Trainings.
RCF Ltd	Collaborative Programmes like trainings/ seminars.
NAARM, Hyderabad	Field Experience Trainings for ASRB scientists
CIMMYT, Hyderabad	Trainings, DAESI
MANAGE, Hyderabad	Trainings, DAESI
IAT and Krishika Samaja	Collaborative Programmes like trainings, Workshops

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.)
NICRA	17-01-2011	ICAR	8,30,000-00
Bio-engery Information and Demonstration Centre	22-3-2011	Karnataka State Bio-engery Development Board, GoK	2,00,000-00
Sujala-III, KWDP-II	Feb, 2018	Department of Horticulture	1,00,000-00

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?

Coordination activities between KVK and ATMA during 2017-18

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	Working meeting	2		
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)				

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
07	**Other Activities** (Pl.specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				
	Others	Agriculture Technology Week, World Soil Health Day, World Food Day, Kisan Mahila Diwas.	-	**04**	ATMA Staff and other personnel attended

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. G. 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 2017	Text Message					-			-
May	Text Message	03	03			03		06	9
June	Text Message	07	01			04	01	12	13
July	Text Message	05	02			01		08	8
August	Text Message								
September	Text Message	03					03	06	6
October	Text Message	02				02	01	05	3
November	Text Message					03		03	3
December	Text Message					03		03	3
January 2018	Text Message					04		04	4
February	Text Message								
March	Text Message					03		03	3
Total	**Total**	20	06			23	05	54	11561

- A total of 11561 farmers registered for KMAS. Depending on the message categary, farmers are receiving the messages

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Banana Special	2011-12	-		Micronutrient Mixture	1,696 kg	130773	311850-00	
2	Horticulutre Nursery	2009-10	0.1	Arsikere tall	Coconut	1,11,129 No	324307-00	399380	
				Local	Arecanut	8,109 No			
				KDM-1	Drumstick	15,087 No			
				Alphanso	Mango	1,176 No			
				Local	Curry Leaf	216 No			
				KDM-1	Drumstick	8,757 No			
				Local	Lime	54 No.			

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Ragi	22-08-2017	21-01-2018	0.5	ML-365	-	3.6 q grains 1 Tractor Load fodder 1 Tractor load husk	12.245	14.245	
Navane	22-8-2017	28-01-2018	0.5	DHFT 109-3	-	3.8 q grains 1 Tractor land fodder 1 Tractor load husk	10,320-00	15,512-00	
Bajra	22-8-2017	18-12-2017	0.5	Local	-	0.73 q grain	10,850-00	14,600-00	

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Korale						249 kgs grains 1 Tractor load fodder	10,850-00	14,600-00	
Udalu	21-08-2017	22-11-2017	0.5	Local	-	3.8 q grains 1 Tractor load fodder 1 Tractor load husk	13,175-00	14,524-00	
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	*Trichoderama viridae*	3.63 q	23649-00	43710-00	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Crossbred Cow Dairy	HFx	Milk	10,261 L	355775-00	363881-00	
	Azolla Demo Unit	Azolla pinnata		0.25 q		780-00	
	Vermiculture and Vermicompost demo unit	Eudrilus Sp	Compost Earthworms	151.88 q	153368-00	153375-00	
	Ornamental Fish Proudction Unit	Guppies and Molly	Ornamental fishes	1448 No.	6350-00	13990-00	

13.E. Utilization of hostel facilities Accommodation available : 36

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2017	26	04	
May	30	11	
June	08	02	
July	12	03	
August			
September	05	21	
October		-	
November			
December	60	04	
January 2018	37	03	
February	-	-	
March	-	-	
Total	**178**	**47**	

13.F. Database management

S.No	Database target	Database created
1	Data base on soil test, water test, raido talk, guest lecture and other extension activities including FLD and OFTs.	Updating has continue with this data base

13.G. Details on Rain Water Harvesting Structure and micro-irrigation system: Not sanctioned.

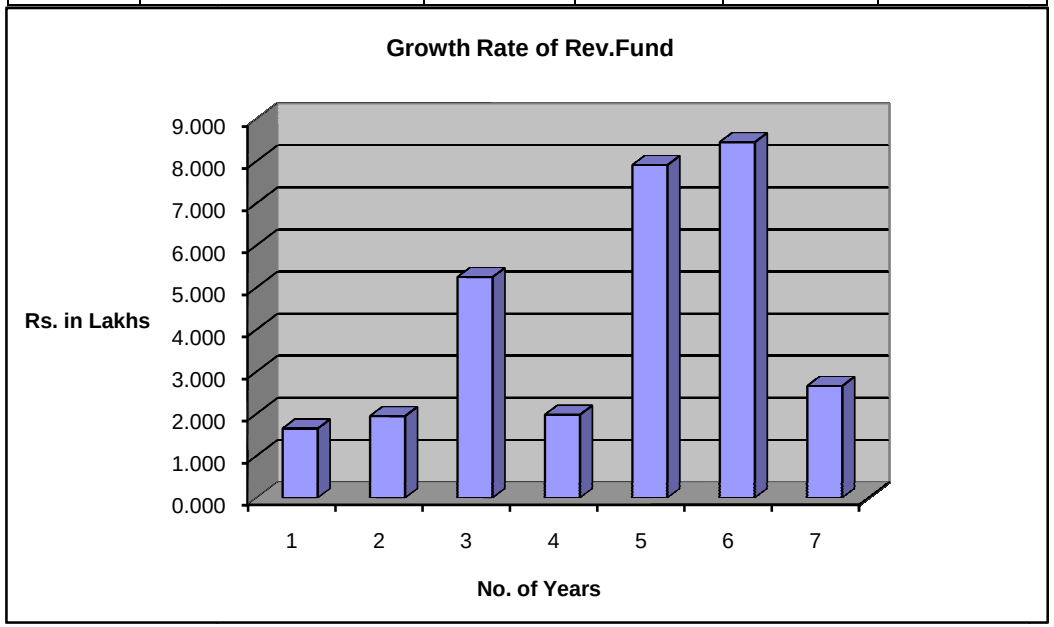
Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		

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 KVK :	State Bank of India	P.J. Extension, DAVANAGERE - 577002	5624	ICAR-Taralabalu Krishi Vigyan Kendra	30166599498	577002002	SBIN 0005624
With Host Institute :	Canara Bank	Vidyanagar, DAVANAGERE - 577004	1813	Taralabalu Rural Development Foundation	1813101010143	0577015007	CNRB 0001813

14. B. Utilization of KVK Funds During the Year 2017-18 (Rs. In Lakhs)				
Sl. No.	**Particulars**	**Sanctioned (RE)**	**Released**	**Expenditure**
1	2	3	4	5
A.	**RECURRING ITEMS :**			
1	Pay & Allowance	123.000	122.889	122.889
2	Travelling Allowance	0.900	0.900	0.860
3	**Other Contingencies :**	**19.000**	**18.388**	**18.514**
a)	Office Stationery, Telephone, etc.	3.610	3.068	3.240
b)	POL & Repairs	3.000	3.000	3.000
c)	Meals/Refreshment for Trainees	1.000	1.000	0.994
d)	Training & Demon. Materials	0.700	0.700	0.700
e)	Front Line Demonstrations (FLD)	3.950	3.880	3.874
f)	On Farm Testing	0.400	0.400	0.387
g)	Integrated Farming System (IFS)	0.500	0.500	0.499

Sl. No.	Particulars	Sanctioned (RE)	Released	Expenditure
1	2	3	4	5
A.	**RECURRING ITEMS :**			
j)	Farmers Field School (FFS)	0.300	0.300	0.300
k)	EDP / Innovative Activities	0.300	0.300	0.300
l)	SWT & Soil Health Cards	0.300	0.300	0.298
m)	Maintenance of Building	2.000	2.000	1.999
n)	Farmers Conclave & KVK Conference	1.000	1.000	1.000
o)	Video Production	0.500	0.500	0.500
p)	Mtc of Library	0.050	0.050	0.050
	Total - 'A'	**142.900**	**142.177**	**142.263**
B.	**NON RECURRING ITEMS :**			
1	Equipments & Furniture			
	a) Office Automation	-		
	b) Furniture & Fixtures	-		
2	Works			
3	Vehicles (Replacement)	-		
4	Establishment of Library			
	Total - 'B'	**-**	**-**	**-**
	Total (A + B)	**142.900**	**142.177**	**142.263**

14.C. Status of Revolving Fund (Rs. In Lakh) for Five Years					
(Sanctioned : Rs.1 Lakh During 2004-05, Seed Money Returned : Rs.1 Lakh)					
Sl. No.	**Year**	**Opening Balance**	**Receipts**	**Payments**	**Closing Balance**
		Rs. In Lakhs			
1	April 11 To Mar-12	0.695	41.291	40.339	1.647
2	April 12 To Mar-13	1.647	33.193	32.898	1.942
3	April 13 To Mar-14	1.942	29.733	26.432	5.243
4	April 14 To Mar-15	5.243	40.308	43.578	1.973
5	April 15 To Mar-16	1.973	39.112	33.18	7.905
6	April 16 To Mar-17	7.905	42.129	41.585	8.449
7	April 17 To Mar-18	8.449	36.047	41.837	2.659



15. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. Devaraja T.N. Mr. Raghuraja J.	Senior Scientist Cum Head Subject Matter Specialist (Agriculture Extension)	Corporate Social Responsibility for Agricultural Development	MANAGE, Hyderabad	4-5, July 2017
Mr. Basavanagowda M.G.	Subject Matter Specialist (Horticulture)	Extension Plus Practicing beyond technology transfer	MANAGE, Hyderabad	5-7 July 2017
Mr. Mallikarjuna B.O.	Subject Matter Specialist (Agronomy)	Digital media innovations in extension	MANAGE, Hyderabad	26-28 July 2017
Dr. Devaraja T.N. Mr. Mallikarjuna B.O.	Senior Scientist Cum Head Subject Matter Specialist (Agronomy)	Management of Climate Change for sustainable production system on Agriculture	MANAGE, Hyderabad	16-18 August 2017
Mr. Sannagoudra H.M.	Subject Matter Specialist (Soil Science)	Navigation of ICTs in Agriculture	MANAGE, Hyderabad	4-7 September 2017
Mr. Mallikarjuna B.O. Mr. Basavanagowda M.G.	Subject Matter Specialist (Agronomy) Subject Matter Specialist (Horticulture)	Sujala-3 activities	ATARI and NBSS and LUP, Bengaluru	17-18 Jan 2018
Dr. Devaraja T.N. Dr. Jayadevappa G.K.	Senior Scientist Cum Head Subject Matter Specialist (Animal Science)	Latest technologies in animal sciences and Fisheries	NIANP, Benglafuru	6 Feb. 2018
Mr. Sannagoudra H.M.	Subject Matter Specialist (Soil Science)	Application of Statistical Techniques in Agricultural Sciences	UAS, Dharwad	19 Dec. 2017 to 8 Jan. 2018

16. Other Information.

- In collaboration with Department of Agriculture, Davanagere, Krishi Vigyan Kendra specialists participated in 'Krishi Abhiyana' programmes under the theme: Development programmes towards farmers door steps' with emphasis on programmes on minor millets (23 programmes)
- Three orientation programmes for 2nd PUC passed students were organized to motivate and educate students to prepare for practical exam to get admission to courses in Agricultural Universities.
- One year Diploma in Agricultural Extension Services for Input Dealers (DAESI) was completed for 40 input dealers from Harihara taluk and second batch for 40 CEO's of co-operative societies was started.
- Krishi Vigyan Kendra hosted one year Diploma in Traditional Medicine for 40 participants in collaboration with 'Paramparika Vyadya Parishat-Karnataka (R).
- Participated in inauguration of PPV & FRA regional centre at UAHS, Shivamogga on 04-05-2017.
- Organized health camp at Doddabbigere village, Channagiri taluk on 31-5-2017 with emphasis on 'Role of Rural Women Health in Agriculture'. Dr. Shanta Bhat, Gynacologist, Davanagere participated as resource person.
- Organized training on 'opportunities in Agriculture for Rural Youth' in collaboration with Technoserve (P) Ltd., Davangere.
- Organized training on 'Opportunities for Physically Challenged Youth in Agriculture' in collaboration with Association of People with Disability, Davanagere on 1-6-2017.
- Organized paid training on 'Sandal wood and Other Forestry Technology' on 29-6-2017. Dr. Ramakrishna Hegde, Professor, College of Forestry, UAHS, Shivamogga and Sri Gopya Naik, ACF, Department of Forestry, Davanagere participated as resource persons.
- Krishi Vigyan Kendra hosted 3 day Public Education Camp for B.Ed students from Smt. Sarvamangalamma Maganur Basappa Shikshana Vidyalaya, Davanagere from 26-4-2017 to 28-4-2017.
- Krishi Vigyan Kendra promoted farmer Sri. Anjaneya A.N. from Kumbalur Village, Harihara taluk received reward from 'Karnataka Bio-diversity Board, Bengaluru for bio-diversity conservation activities.
- Krishi Vigyan Kendra participated in 'Flower Show' organized by Department of Horticulture' Davanagere from 18-4-2017 to 20-4-2017.
- Krishi Vigyan Kendra sanctioned with new vehicle by ICAR.- Mahndra Bolaro.
- Krishi Vigyan Kendra participated in the 'Farmers-Scientists interactive progamme' on 'Alternative crops for Bhadra Command area' organized in collaboration with Department of Agriculture, Davanagere and AHRS, Kathalagere.

- **Swacha Bharat Abhiyana (15-9-2017 to 2-10-2017)**
  - ❖ 'Sewa Diwas' was celebrated on 17-9-2017 by involving in cleaning of Krishi Vigyan Kendra instructional farm.
  - ❖ Awareness programmes were organized in Agasanakatte and Siddanur villages on 18-9-2017.
  - ❖ 'Samagra Swachhata Diwas' was celebrated at K. Kallahalli and Chikkanajigere. Villages, Harapanahalli taluk by creating awareness on having toilets in each and every house. The house holds who do not have toilets were convinced and motivated to construction of toilets.
  - ❖ 'Sarwatra Swachhata' was celebrated on 25-9-2017 by cleaning Government Higher Primary School, Rameshwara village of Honnali taluk with participation of school children, teachers and villagers.
  - ❖ Public function was organized in KVK on 28-9-2017. Member, Davanagere City Municipality Corporation and Farmer Deputy Mayor, Sri Belavanur Nagarajappa participated in the programme.
  - ❖ On 1-10-2017 cleaning of 12^{th} Century well of tourist importance was undertaken at Chikkamajigere village, Harapanahalli taluk in collaboration with district administration.
  - ❖ Gandhiji and Shatriji Jayanthis was celebrated on 2-10-2017 and honored Sri. Anjaneyappa, Davanagere Municpality worker for his contribution towards cleaning city area.
- **Field Experience Training (FET) for ASRB scientist:**

  FET for 6 newly recruited ASRB scientist sponsored byNAARM, Hyderabad was organized for 21 days from 10-8-2017 to 31-8-2017. The scientist team studied Agasanakatte village and developed Village Agricultural Development Plan (VADP).
- **Seed ball programme:**

  Seed ball programme with the blessings and presence of HH Sri. Taralabalu Jagadguru Dr. Shivamurthy Shivacharya Mahaswamiji, Sirigere and HH Sri Panditharadya Shivakumara Shivacharya Swamiji, Sanehalli was organized in collaboration with Department of Forestry, Davanagere and Chitradurga, Taralabalu Vidya Samsthe, Sirigere at Sirigere, Chitradurga district. Mr. C. Karthik, Bengaluru participated as resource person. Nearly 3000 School Children involved in preparation and placement of 3 lakh seed balls at Shivakumara vana.
- **Special Days Celebrated:**

1. 'World Environment Day' was celebrated in collaboration with DRR High School, Davanagere.
2. 'National Fish Farmers Day' was celebrated on 10-7-2017 in collaboration with Department of Fisheries, Davanagere.
3. 'World Honey Bee Day' was celebrated on 19-8-2017. A training programme on 'Production Technology of Honey' was organized on the occasion in collaboration with Department of Horticulture, Davangere. Sri Parameshwarappa, Kathalagere village, Channagiri taluk, a successful honey and honey bee colony producer and seller was the resource person.
4. 'World Biofuel Day' was celebrated at Government Higher Primary School, Kunkuva, Honnali tq. on 11-8-2017.
5. 'Parthanium Awareness Week' was observed from 16-22 August, 2017.
6. 'World Fisheries Day' was celebrated on 21-11-2017 in collaboration with Department of Fisheries, Agriculture and ATMA Project, Davanagere. Smt. Padma Basavantappa, Additional D C., Davanagere inaugurated the programme.

7. ‘Mahila Kisan Diwas’ and ‘World Food Day’ were celebrated in collaboration with Department of Agriculture, Horticulture, ATMA Project, IAT, Davanagere on 16-10-2017.
8. ‘Kisan Samman Diwas’ was celebrated in collaboration with Department of Agriculture, Horticulture, ATMA project and IAT, Davanagere on 23-12-2017.
9. ‘Women in Agriculture Day’ was celebrated in Krishi Vigyan Kendra on 04-12-2017 in collaboration with Development Departments.
10. ‘World Soil Health Day’ was organized in collaboration with Development Department, Krishika Samaja and RCF Ltd. Sri Siddeshwara G.M., Member of Parliament inaugurated the programme on 5-12-2017.
11. ‘National Science Day’ was celebrated on 28-2-2018 in collaboration with Department of Agriculture and Horticulture and IAT, Davanagere. Dr. Gayatri Devaraja, Dean, Science Disvision, Davanagere University inaugurated the programme.
12. **Independence Day Celebration:** Independence day was celebrated on 15-8-2017
13. **Republic Day Celebration:** 69th Republic Day was celebrated on 26-1-2018.

- **Dignitaries visit:** Dr. Usha Rani, IAS, Director General , MANAGE, Hyderabad and Dr. Shrivatsava, Director, Directorate of Oilseed Research , Hyderabad visited Krishi Vigyan Kendra.
- **Awards/Recognitions:**
  - In recognition of innovative extension work and services rendered to farming community of the district, Senior Scientist and Head of KVK Dr. T.N. Devaraja has been conferred with ‘Krishi Ratna’ award by Karuna Jeeva Kalyana Trust, Davanagere on 7-10-2017.
  - Smt. Yashodhamma, FLD farm woman from Rameshwara village, Honnali tq. recognized by Maganuru Basappa Trust, Davanagere as ‘Best Women Farmer’
- **Sankalpa Se Siddhi Programme:**
  Sankalpa Se Siddhi Programme was organized on 28-8-2017. Sri. Siddeshwara G.M., Former Central Minister and Member of parliament presided over the function. Sri Ravindranath, Former Minister, Government of Karnataka inaugurated the programme, Sri Shivamurthy Naik, MLA, Dr. Chandregouda M.J., Principal Scientist, ATARI, Bengaluru, Members from Zilla Panchayath participated as Chief Guests. Prime Minister Message and 7 point programme for doubling farmer income was emphasized in the programme.
- Participated in 2 day ‘National Consultation on Farmers Organization: Status and prospect’ on 25-26 July 2017 organized jointly by NABARD, NIANP, NDRI, ATARI, Bengaluru, Indian Society of Extension Education at NIANP campus, Bengaluru. Four representatives from farmers groups from Davanagere district participated along with Krishi Vigyan Kendra scientists.

- **Krishi Melas:**
  - Five day Krishi Mela was organized at Sirigere, Chitradurga district on the occasion of Shraddhanjali programme of Lingykya Sri Taralabalu Jagadguru Dr. Shivakumara Shivacharya Mahasamiji blessing 20-24 September, 2017, Development Department and input agencies participated in the programme.
  - Krishi Mela was organized on the occasion of 'Taralabalu Hunnime Mahotsava 2018' at Jagalur from 23-1-2018 to 31-1-2018 in collaboration with Development Departments and input agencies.
- Dental camp was organized in collaboration with Bapuji Dental College and Hospital, Davanagere at NICRA Project village Siddanur, Davanagere tq.
- Awareness Programmes on Army worms:

  The district witnessed incidence of army worms after a gap of 15 years. Late sown Maize crop in Jagalur, Harapanahalli and Davanagere tq. were severely affected. Krishi Vigyan Kendra jointed hands with Department of Agriculture and conducted Awareness Campaigns for Management of army worms.
- **Vision 2025**

  Krishi Vigyan Kendra participated in formulation of development plan for the district in 'Vision 2025' along with district administration, Krishi Vigyan Kendra has given specific recommendations for Development of Agriculture sector.
- **Special Programmes for Farmer producer Company Ltd.**

  1. Participated in inauguration of 'Shri Kalpataru Coconut Producer Organization on 23-1-2018 at Anaberu, Davanagere tq.
  2. FPCs interactive programmes was organized on 8-1-2018 in collaboration with Department of Horticulture, Animal Husbandry and Veterinary Sciences, NABARD and RCF Ltd.
  3. Organized FPCs interactive programme to discuss agricultural problems faced by FPC members and to plan technology interventions during 2018-19 on 22-2-2018.
  4. Attended general body meeting of Vishwabandu Farmers Producer Company Ltd, Hebbal, Davanagere taluk on 10-2-2018.
  5. Organized training on 'Online Marketing of Agricultural Produce' in collaboration with ASCI and NABARD, Davanagere on 12-3-2018.
  6. Participated in Annual General Body Meeting of 'Bhadra Farmers Producer Company Limited, Bhanuvalli initiated by Technoserve (Pvt.) Ltd, Davanagere on 23-3-2018
- **Special Trainings:**
  1. Organized training on ' Plant propagation and soil fertility management' for engineering students from Bapuji Institute of Engineering Technology, Davanagere on 20-1-2018.
  2. Organized 10 capacity building trainings on 'Soil and Water conservation, selection of crops in watershed areas' for 505 farmers sponsored by Sujala-III under KWDPI.

- **Seminar:**

  Organized Seminar on 'Marketing of BRG-5 variety redgram as seeds' for participant farmers of cluster demonstration under NFSM (2016-17 and 2017-18) to motivate growers to sell BRG-5 Variety as seeds in collaboration with Department Agriculture, RCF Ltd., and Agroseeds corporation, Davanagere on 29-1-2018.

- **Special Programmes:**

  Organized 'Farmr-Scientist interactive programme' on 17-3-2018 on the occasion of 'Unnatimela' for doubling farmers income in collaboration with Development Departments, Krishika Samaj' and IAT, Davanagere and AHRS, Kathalagere. Live telecast of Prime Ministers address was organized on the occasion. Sri G.M. Siddeshwara, Member of parliament inaugurated the programme. Dr. Devaraja T.N., Senior Scientist Cum Head participated in Krishi Vigyan Kendra National Conference held in New Delhi during 16-17 March, 2018.

- **Farmers Conclave:**

  Participated along with – farmers in two day farmers conclave organized by NIANP and ATARI, Bengaluru during 16-17 February 2018, Sri Radha Mohan Singh, Union Minister for Agriculture and Farmers Welfare inaugurated the programme and central ministers Sri Anant Kumara H.N., Sri D.V. Sadananda Gowda and Sri Anant Kumar Hegde, Dr. Trilochan Mahapatra, Secretary (DARF) and DG, ICAR, New Delhi participated in the programme.

- **Farmers Scientists interactive progamme:**

  Participated in farmers- Scientist interactive programme organized by Madalu mutt, Madalu, Arsikere tq. on 13-1-2018.

- **National Innovations on Climate Resilient Agriculture (NICRA) Project:**

  - Dry fodder enrichment demo taken up with 46 farmers.
  - Deepening and Desilting of 3 Check Dams in Agasanakatte village.
  - Use of Micronutrients in Tur Crop. Conducted demo with 75 Farmers + 34 farmers.
  - Animal Health Camp conducted and Treated 81 animals.
  - Treated 65 Animals for various ailments in collaboration with Department of AH and VS.
  - Mineral supplements shared to 87 Farmers (TDC).
  - Multicut Fodder crops production demonstration taken up with 44 Farmers.
  - Hydroponic fodder production taken up with 5 Dairy Farmers.
  - Finger millet production Demo conducted with 32 Farmers.
  - Demo on use of 'Vegetable Special in Tomato' conducted with 25 Farmers.

ICAR – Taralabalu Krishi Vigyan Kendra, Davanagere

SUMMARY FOR 2017-18

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Onion	Role of sulphur in improving the productivity of onion	05
Varietal Evaluation	Bengalgram	Assessment of Bengalgram Variety for Wilt and Drought Resistance	03
Integrated Pest Management	Foxtail Millet	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed	03
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			

Thematic areas	Crop	Name of the technology assessed	No. of trials
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)			
Total			

Summary of technologies assessed under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

Summary of technologies assessed under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
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 refined	No. of trials
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			

Summary of technologies assessed under refinement of various livestock

Thematic areas	Name of the livestock enterprise	Name of the technology refined	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)			
Total			

Summary of technologies refined under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

Summary of technologies refined under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

III. FRONTLINE DEMONSTRATION

Crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmers	Area (ha)
Cereals				
Maize + Redgram	ICM	Integrated Crop Management in Maize + Redgram;	30	12
Rice	IPDM	Integrated Pest and Debases Management in Rice	10	04
Wheat	ICM	Integrated Crop Management in Wheat	20	08
Sorghum	ICM	Integrated Crop Management in Sorghum	25	10
Millets				
Finger Millet	ICM	Integrated Crop Management in Finger Millet (ML-365)	28	12
Oilseeds				
Sunflower	ICM	Integrated Crop Management in Sunflower	50	20
Pulses				
Blackgram (NFSM)	ICM	Integrated Crop Management in Blackgram	25	10
Redgram (NFSM)	ICM	Integrated Crop Management in Redgram	50	20
Bengalgram (NFSM)	ICM	Integrated Crop Management in Bengalgram	40	20
Vegetables				
Onion	Varietal Demonstration	Introduction of High yielding onion variety Bhima Super	05	02
Flowers				

Crop	Thematic area	Name of the technology demonstrated	No. of Farmers	Area (ha)
Ornamental				
Fruit				
Mango	ICM	Integrated crop management in mango	10	04
Fibres like Cotton				
Spices and condiments				
Commercial				
Cotton	ICM	Integrated Crop Management in Cotton	25	10
Medicinal and aromatic				
Fodder				
Hydroponics	Nutrition Management	Hydroponic Fodder Production to Alleviate fodder Scarcity.	10	-
Plantation				
Fibre				
	Total			

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units
Dairy				
Cows	Integrated Management in Dairy Animals	Feeding dairy animals as per the Indian Standards (NRC standards)specifications by adopting Total Mixed Ration Concept.	15	15
Poultry				
Rabbit				
Piggery				
Sheep and goat				

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units
Sheep	Total Deworming and Balanced Nutrition in Small Ruminants for better performance	Balancing the Nutrition. 2. Controlling of worms infestation.	15	15
		Total		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units
Common carps				
Fisheries	Small scale income generation	Integrated Management of Fish culture in big ponds	05	05
Mussels				
Ornamental fishes				
Others (pl.specify)				
		Total	**05**	**05**

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated	No. of Farmers	No.of units
Oyster mushroom			
Button mushroom			
Vermicompost			
Sericulture			
Apiculture			
	Total		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Women empowerment

Category	Name of technology	No. of demonstrations	No. of women involved	No. of groups involved
Women				
Pregnant women				
Adolescent Girl				
Other women				
Children				
Neonats				
Infants				
Children				

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmers	Area (ha)

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)
Cereals			
Bajra			
Maize	Private	30	12
Rice			
Sorghum			
Wheat			
Others (pl.specify)			
Total			
Oilseeds			
Castor			
Mustard			
Safflower			
Sesame			
Sunflower	MSFH-17	50	20
Groundnut			
Soybean			
Others (pl.specify)			

Crop	Name of the Hybrid	No. of farmers	Area (ha)
Total			
Pulses			
Greengram			
Blackgram			
Bengalgram			
Redgram			
Total			
Vegetable crops			
Bottle gourd			
Capsicum			
Others (pl.specify)			
Total			
Cucumber			
Tomato			
Brinjal			
Okra			
Onion			
Potato			
Field bean			
Others (pl.specify)			
Total			
Commercial crops			
Sugarcane			
Coconut			
Cotton	Bt.	25	10

Crop	Name of the Hybrid	No. of farmers	Area (ha)
Total			
Fodder crops			
Maize (Fodder)			
Sorghum (Fodder)			
Others (pl.specify)			
Total			

IV. Training Programme

Training for Farmers and Farm Women including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	04	74	01	75	18	03	21	92	04	96
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables	01	24	06	30	05	06	11	29	12	41
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production and 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	02	30	-	30	26	-	26	56	-	56
Integrated water management										
Integrated nutrient management	01	103	04	107	07	-	07	110	04	114
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	03	66	07	73	-	-	-	66	07	73
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	02	33	02	35	01	-	01	34	02	36
Animal Disease Management	01	-	14	14	01	-	01	01	14	15

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Feed and Fodder technology	01	04	05	09	01	-	01	13	06	19
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Plant Protection										
Integrated Pest Management										
Integrated Disease Management	01	38	-	38	02	-	02	40	-	40
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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	01	99	01	100	06	00	06	105	01	106
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics	02	85	-	85	09	-	09	94	-	94
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies	01	78	05	83	15	-	15	93	05	98
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**20**	**634**	**45**	**679**	**91**	**09**	**100**	**735**	**54**	**779**

Training for Farmers and Farm Women including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management	01	15	-	15	-	-	-	15	-	15
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation	01	01	-	01	28	-	28	29	-	29
Seed production										
Nursery management										
Integrated Crop Management	07	201	-	201	33	2	35	234	2	236
Soil and Water Conservation										
Integrated Nutrient Management	05	10	02	112	17	-	17	27	02	129
Production of organic inputs										
Others (Seed treatement)`	03	41	01	42	23	-	23	64	01	65
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables	01	-	25	25	-	-	-	-	25	25
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization	01	04	06	10	-	-	-	04	06	10

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology	03	73	06	79	37	01	38	110	07	117
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl.specify)										
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	04	87	14	101	09	-	09	96	14	110
Integrated water management	01	20	-	20	03	-	-	-	11	02
Integrated nutrient management	01	11	02	13	-	-	-	11	02	13
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	03	56	06	62	10	-	10	66	06	72
Nutrient use efficiency	01	06	13	19	-	-	-	06	13	19
Balanced use of fertilizers										
Soil and water testing	02	36	05	41	08	-	08	44	05	49
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	02	69	02	71	06	-	06	75	02	77

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management	01	21	-	21	01	-	01	22	-	22
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	05	74	02	76	19	01	20	93	03	96
Integrated Disease Management	03	48	-	48	16	-	16	64	-	64
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others **(Safe use of Pesticides)**	01	09	-	09	02	-	02	11	-	11
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Mushroom production										
Apiculture										
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital	01	40	62	102	01	10	11	41	72	113
Entrepreneurial development of farmers/youths										
Others (Mobie App Uploading)	01	29	-	29	-	-	-	29	-	29
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	**48**	**961**	**146**	**1107**	**216**	**14**	**230**	**1177**	**160**	**1337**

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										

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 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										
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										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other : Orientation for 2nd PUC students	07	269	130	408	13	21	34	282	160	442
Role of youth in Agriculture	01	12	11	23	04	04	08	16	15	31
TOTAL	**08**	**281**	**150**	**431**	**17**	**25**	**43**	**298**	**175**	**473**

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										

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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										
TOTAL										

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	01	22	02	24	-	-	-	22	02	24
Integrated Pest Management										
Integrated Nutrient management	03	57	57	114	-	27	27	57	84	141
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	01	12	02	14	07	-	07	19	02	21
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	**05**	**91**	**61**	**152**	**07**	**27**	**34**	**98**	**88**	**186**

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										
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)										
Total										

Sponsored training programmes:

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	02	55	00	55	15	-	15	60	-	40
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										
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										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (Soil and Water conservation and crop selection in watershed area)	**10**	**257**	**36**	**293**	**13**	**99**	**212**	**370**	**135**	**505**

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
	Total	**12**	**312**	**36**	**348**	**128**	**99**	**227**	**440**	**135**	**575**

Details of sponsoring agencies involved
1. Department of Horticulture

Details of Vocational Training Programmes carried out 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										
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,										

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
	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, dying etc.										
4.j.	Agril. para-workers, para-vet training										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
	Grand Total										

V. Extension Programmes

Nature of Extension Programme	No. of Programmes	No. of farmers	No. of Extension Personnel	TOTAL
Field Day	13	477	58	535
Kisan Mela	02	-	-	-
Kisan Ghosthi	28	8199	262	8461
Exhibition	01	425	-	425
Film Show	--	-	-	-
Method Demonstrations	30	843	159	1002
Farmers Seminar	08	196	20	216
Workshop	--	-	-	-
Group meetings	01	20	03	23
Lectures delivered as resource persons	151	6330	3583	9913
Newspaper coverage	55	-	-	-
Radio talks	01	-	-	-
TV talks	04	-	-	-
Popular articles	15	-	-	-
Extension Literature	--	-	-	-
Advisory Services	646	633	13	646
Scientific visit to farmers field	318	3281	635	3916
Farmers visit to KVK	1937	1901	36	1937
Diagnostic visits	37	244	90	344
Exposure visits	02	62	-	62
Ex-trainees Sammelan	--	-	-	-
Soil health Camp	06	216	18	238
Animal Health Camp	02	-	-	-
Agri mobile clinic	--	-	-	-
Soil test campaigns	--	-	-	-
Farm Science Club Conveners meet	04	144	05	149
Self Help Group Conveners	--	-	-	-

Nature of Extension Programme	No. of Programmes	No. of farmers	No. of Extension Personnel	TOTAL
meetings				
Mahila Mandals Conveners meetings	--	-	-	-
KMAS	52	11054	316	11370
Bi/Tri monthly meeting	08	0	0	0
World Environment Day	01	29	03	32
National Fish Farmers Day	01	107	00	107
International biofuel Day	01	185	18	203
World Honey Bee Day	01	66	40	106
Kisan Mahila Diwas & World Food Day	01	45	05	50
World Fisheries Day	01	120	03	123
Farmers Day	01	98	54	152
World Soil Health Day	01	421	06	427
Parthenium Awareness Week	01	55	07	62
Total	**3330**	**35151**	**5354**	**50489**

Details of other extension programmes

Particulars	Number
Electronic Media	1
Extension Literature	2
News Letter	4 issues
News paper coverage	55
Technical Articles	-
Technical Bulletins	-
Technical Reports	-
Radio Talks	01
TV Talks	04
Animal health amps (Number of animals treated)	2 (185 Animals)
Others (pl.specify)	-
Total	**69**

VI. PRODUCTION OF SEED/PLANTING MATERIAL

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)	Ragi	ML- 365	--	3.6 q	9,000-00	6
	Navane	DHFT 1093	-	3.8 q	4,560-00	2
	Bajra	Local	-	0.73 q	2,190-00	1
	Korale	Local	-	2.49 q	7,470-00	1
	Udalu	Local	-	3.42 q	4,140-00	3
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total				**14.04**	**27,360-00**	**13**

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						
	Curry leaf	Local	-	216	4400	07
Vegetable seedlings	Drumstick	KDM-1	-	8757	87570	37
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation	Arecanut	Local	-	8109	202725	21
	Lime	Local	-	54	2700	1
	Coconut	Local	-	1129	101305	57
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				**18265**	**398700**	**121**

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	*Trichoderma*	363	43540	21
Bio Agents				
Others (specify)	Banana Speical	1696	296800	335
Total	**Total**	**2059**	**340360**	**356**

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Milk	HFx, Jersy	10211 L	3,48,874	244
Vermicompost	HFx, Jersy	15188 kg	1,39,485	164
Earthworms	Ubrilous spp	37.6 kg	11280	25
Azolla	Azolla pinneta	25 kg	500	17
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings	Guppies, Molly	1448	13,970	03
Others (Pl. specify)				
Total			**5,14,109-00**	**453**

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2017-18

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	6024	4894	3084	564581
Water Samples	4652	3448	2995	222850
Plant samples				
Manure samples				
Others (specify)				
Total	**10676**	**8342**	**6079**	**787431**

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	2149	1592	1260	196100
Water Samples	1627	1270	1009	81000
Plant samples				
Manure samples				
Others (specify)				
Total	**3776**	**2862**	**2269**	**277100**

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
5-12-2017	1592	2192	2149	1260	Member of Parliament	Zilla Panchayath Members, Line Department Heads.

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
01

IX. NEWSLETTER

Number of issues of newsletter published
04

X. RESEARCH PAPER PUBLISHED

Number of research paper published
02

XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)

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