ICAR-TARALABALU KRISHI VIGYAN KENDRA, DAVANAGERE
DISTRICT: DAVANAGERE

ANNUAL PROGRESS REPORT- 2018-19

(FOR THE PERIOD FROM 01 APRIL 2018 TO 31 MARCH 2019)

KVK Address and Host Organization details

PART I - GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
ICAR- Krishi Vigyan Kendra Kadalivana, LIC Colony Layout, B.I.E.T. Road, Davanagere – 577 004 Davanagere-Dist.	**Office**	**Fax**		
	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 2019

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/ F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Head/Senior Scientist	Dr Devaraja T N	Senior Scientist-Cum-Head	M	Fishery	Ph.D. in Fisheries & Aquaculture	37400-67000	51720	17-05-2005	Permanent	Others
2	Scientist/SMS	Basavanagowda M G	Subject Matter Specialist	M	Horticulture	M.Sc. [Horti.]	15600-39100	25550	21-11-2006	Permanent	Others
3	Scientist/SMS	Mallikarjuna B O	Subject Matter Specialist	M	Agronomy	M.Sc. [Agri.] - Agronomy	15600-39100	24610	09-01-2008	Permanent	Others
4	Scientist/SMS	Dr G K Jayadevappa	Subject Matter Specialist	M	Animal Science	M.V.Sc. Animal Nutrition	15600-39100	24610	29-01-2008	Permanent	Others
5	Scientist/SMS	Raghuraja J	Subject Matter Specialist	M	Agri. Extension	M.Sc. [Agri.] – Agri. Extn.	15600-39100	23740	23-06-2008	Permanent	Others
6	Scientist/SMS	H.M. Sannagoudra	Subject Matter Specialist	M	Soil Science	M.Sc. [Agri.] – Soil Science & Agri. Chemistry	15600-39100	18950	01-07-2013	Permanent	Others
7	Scientist/SMS	Vacant	Subject Matter Specialist		Plant Protection		15600-39100			Permanent	Others
8	Programme Assistant (Lab Tech.)	Revanasiddappa GBP	Programme Assistant	M	Lab Assistant	M.Sc. [Agri.] – Seed Science & Technology	9300-34800	11940	11-04-2012	Permanent	Others
9	Programme Assistant (Computer)	Santhosh B	Programme Assistant	M	Computer	B.Sc. (Computer Science)	9300-34800	14530	05-09-2008	Permanent	Others

10	Programme Assistant/ Farm Manager	Vijayakumar S B	Farm Manager	M	Farm Manager	M.Sc. [Agri] – Plant Breeding & Genetics	9300-34800	13450	23-06-2008	Permanent	Others
11	Assistant	Mallikarjuna S Gudihindala	Assistant / Superintendent	M	Assistant/ Superintendent	Bachelor in Commerce	9300-34800	18240	01-06-2005	Permanent	Others
12	Jr. Stenographer	Mamatha H Melmalagi	Stenographer Gr.III	F	Stenographer Gr.III	Bachelor in Commerce	5200-20200	12400	27-06-2005	Permanent	Others
13	Driver - 1	Marulasiddaiah N M	Driver (Jeep)	M	Driver (Jeep)	B.A.	5200-20200	9370	01-06-2005	Permanent	Others
14	Driver - 2	S Shivakumar	Driver (Tractor)	M	Driver (Tractor)	S.S.L.C.	5200-20200	10090	01-06-2005	Permanent	Others
15	SS-1	B Shivakumar	Grade-I	M	Grade-I	S.S.L.C.	5200-20200	8870	01-06-2005	Permanent	Others
16	SS-2	S E Shivakumar	Grade-I	M	Grade-I	S.S.L.C.	5200-20200	8870	01-06-2005	Permanent	Others

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
Vacant					
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):…….. 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)							

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
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
	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

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
	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	13,166-00			Completed
14	Truss work above Administration Building	Private Donors	December 2018		9,50,000-00			Completed

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor and Trailer	2005	4,99,995-00	37694 km	Good
Power tiller Funded by FLD cotton	2008	99400-00	-	Good
Power Tiller	2010	131500-00	-	Good
Mahindra Bolero	2017	8,00,000-00	44755 km	
Hero Honda CD Deluxe	2006	39,298-00	75407	Good
Yamaha Alba	2009	48,309-00	60975 km	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 2018-19

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
21-12-2018	Sri. Taralabalu Jagadguru Dr. Shivamurthy Shivacharya Mahaswamiji, President Taralabalu Rural Development Foundation, Sirigere Dr. Chandregowda M.J, Director, ATARI, Bengaluru. Dr. N. Loganandhan, Representative of Director, IIHR, Bengaluru. Dr. T.H. Gowda, Director of Extension, UAHS, Shimoga. Dr. Ramappa Patil, Representative of ADR, UAHS, Shivamogga. Sri Sharanappa Mudagal, Joint Director of Agriculture, Davanagere. Shri. T.R. Vedamurthy, Deputy Director, Department of Horticulture, Davanagere	1. To go for rapid multiplication method for production of quality planting material in Pepper. 2. To involve farmers in vegetable seed production and to study Krishi Vigyan Kendra Thrissur Women Groups in this regard. 3. To collect the demand and supply statistics for Onion before season. 4. To promote dry fodder enrichment before feeding to animals. 5. To use least cost seed formulation while preparing compounded feeds at house hold level. 6. To use media properly to give wide publicity for successful technologies. 7. To promote Arka Microbial Consortium (IIHR, Bengaluru) for wilt problems.	On going	

	Dr. Satish K.G., Representative of Deputy Director, AH & VS, Davanagere			

	Shri Raghavendra Prasad, Deputy Director, Sujala Water shed-III, Davangere.			
	Shri. Manjunath N.B., Deputy Conservator of Forests (Social Forestry), Davanagere.			
	Dr. Umesha D. Senior Assistant Director of Fisheries, Department of Fisheries, Davanagere.			
	Smt. Shashikala A. T., Representative of Women and Child Development Welfare, Department, Davanagere			
	Shri. N.T. Yerriswamy., Lead Bank, Manager, Canara Bank, Davanagere.			
	Mr. M.G. Vedamurthy, Programme Executive, AIR, Chitradurga.	**Group-II : To be addressed through action plan of KVK in the year 2018-19**		
	Shri. Venkataramanjaneya Swamy, Small Farmer, Salakatte, Harihara Taluk, Davanagere. Shri. Murugeshappa H.B., Big Farmer, Hedne, Davanagere Taluk, Davanagere.	**1.** Develop District Crop Plan and Strategy documents and appraise District Commissioner. 2. Need to minimize use of weedicides in Arecanut. 3. To promote fish seeds production through farmers entrepreneurship which helps to scale up fisheries activities in the distinct. 4. To promote small ruminants rearing among small and marginal farmers and use crop residue efficiently.		

	Smt. Yashoda G.C., Farm Woman, Rameshwara, Honnali Taluk, Davanagere. Smt. Siddabasamma, Farm Woman, Haluvarthy, Davanagere Taluk, Davanagere.			
	Sri Taranath, Doordarshan, Chandana TV, Davanagere. Shri T. Tarakesha, Representative of Assistant Executive Engineer, Dept. of Minor Irrigation, Davanagere Dr. Devaraja T.N., Member Secretary, Senior Scientist-Cum-Head, ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere. **Special Invitees:** 1. Sri K.P. Basavarajappa, Member, Taralabalu Rural Development Foundation, Sirigere. 2. Shri M.K. Renukarya, Representative of Chairman, TRDF, Sirigere (Chairman of the meeting). 3. Shri. Hanumanthappa G., State President, Rajya Krishika Samaja, Davanagere. 4. Shri. Madhusudan, Representative of Programme Executive, AIR, Chitradurga. 5. Dr. Omkarappa, SS&H, ICAR-Krishi Vigyan Kendra, Hiriyur. 6. Dr Ashok P., SS&H, ICAR-Krishi Vigyan Kendra, Hanumanamatti. 7. Mr. Anand, Joint Director, APMC yard, Davanagere.	**Group-III : To be addressed through convergence with Development Departments** **1.** Increase AI activities for the help of dairy farmers may DSR method of Paddy cultivation should be promoted in the entire district. 2. Alternate crops in place of Maize should be promoted through farmers awareness programmes and Media should be used effectively for this purpose. 3. Establishment of small minor millet processing and packing units and Groundnut Oil extraction units in Jagalur tq. 4. To start model nursery for production and supply of Pepper Seedlings. 5. Onion seeds (Good Quality) should be made available to farmers. 6. To identify lacunae in PMFBY and inform the problems faced by farmers to authorities. 7. To promote ripening chambers in Mango through Horticulture Department. 8. To facilitate one or two stalls in APMC for FPOs. 9. To include fisheries components in IFS model by earmarking 15 % area in the farmers. 10. To organize training for bank AEO's on latest Agricultural Technologies. 11. Important tips on Agricultural Technologies to be broadcasted through AIR.		

	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			
	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 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%

Davanagere district is at the centre 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 662.7 mm (actual 721.1 mm in 2018). The variety of soil is medium to deep black and red sandy loam. 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 consist of 6 taluks, 810 villages, 418692 holdings with gross cropped area of 460772 ha. Majority of holding are marginal (135246, 47.84 %), followed by small (84521, 29.9%) semi-medium (45905, 16.24%). The total population of the district was 1945497 (According to 2011 censes) with majority 67.66 % lives in rural areas and 32.34 % lives in urban areas.

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

S. No	Agro-climatic Zone	Characteristics
1.	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.
2.	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 (2017-18)

S. No	**Crop**	**Area (ha)**	**Production (Metric tons)**	**Productivity (kg /ha)**
1	Maize	189436	815691	4533
2	Rice	644013	366340	5988
3	Ragi	23296	42038	1899
4	Jowar	10128	16417	1706
5	Bajra	1562	2327	1568
6	Wheat	196	222	1193
I	**Total Cereals:**	**289786**	**1121376**	
1	Tur (Pigeon pea)	8143	8440	1091
2	Bengalgram	4471	2510	591
3	Horsegram	830	589	747
4	Blackgram	132	62	494
5	Greengram	278	69	261
6	Cowpea & other	1602	585	384
7	Avare	781	760	104

II	**Total Pulses:**	**16242**	**13020**	
	Total Foodgrains:	306018	1134396	3902
1	Groundnut	16390	24932	1601
2		231	50	218
3	Sunflower	2505	2122	892
4	Castor	79	51	677
		60	10	169
III	**Total Oilseeds:**	**19331**	**27260**	
IV	**Commercial Crops:**			
1	Cotton	4768	6749	253
2	Sugarcane Planted	552		
2a	Sugarcane Ratoon	3795	410998	104
3	Tobacco	95	89	984
	GRAND TOTAL			

Area, Production and Productivity of Horticulture crops in the district (2018-19)

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (t /ha)
1	Arecanut	47895	78605.20	1.64
2	Coconut	11132	1391.53 Lakh Nuts	13000 nuts/ha
3	Banana	5233.60	117254.49	22.40
4	Mango	2853.40	27244.66	9.22
5	Sapota	531.60	5439.50	10.23
6	Pomegranate	656.60	7319.11	11.15
7	Tomato	4783	172338.90	36.03
8	Onion	7287	130994.49	17.98
9	Green Chilli	1480	36374.04	24.58
10	Betervine	642.50	745.83 Lakh Leaves	1.16
11	Marigold	639	3085.93	4.83
12	Oil palm	854	7581.50	8.88
13	Cocoa	428.10	38.40	0.09

Source: Department of Horticutlure, Davanagere

2.5. Weather data

Month	Rainfall (mm)		Temperature ^{0} C		Relative Humidity (%)
Month	**Normal**	**Actual**	**Maximum**	**Minimum**	
January 2018	0.9	0.0			
February 2018	1.0	1.9			
March 2018	4.1	27			
April 2018	36.0	27			
May 2018	74.7	127			
June 2018	76.0	71			
July 2018	99.3	77			
August 2018	83.5	111			
September 2018	114.0	56			
October 2018	120.7	86			
November 2018	43.7	21			
December 2018	8.3	4			
Total	662.2	608.9			

Source; Department of Agriculture, Davanagere

Production and productivity of livestock, Poultry, Fisheries etc. in the district (2017-18)

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	--

Source: Department of Statistics, Davanagere

Inland fisheries	--	16052.53 t	800

2.7 District profile maintained in the KVK has been Updated for 2018-19: 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	Nyamathi	Rameshwara	Rameshwara Malligenahalli	3	Onion	• Non availability of suitable varieties for Rabi season	Onion varietal assessment
2	Davanagere	Angodu	Haluvarthy	3	Dairy	• Generally dairy animals are fed with poor quality dry roughages along with a few feed ingredients. These fodders when fed to high yielding dairy animals would not support production and health due to deficiency of Protein, energy & minerals. Poor quality dry roughages when enriched with urea and fed along with Grain mixture (starch) improved the digestibility of dry roughages and supplied the crude protein &Energy(TDN) required by the animal	Animal nutrition

3	Harihara	Malebennur	Kumbaluru	3	Rice	• Incidence of stem borer, blast, Sheath blight and BPH	Integrated Pest and Disease Management
4	Davanagere and Channagiri	Mayakonda Santhebennur	Kabbur Annapur Parashuramapura Doddabbigere	2 3 3 5	Tomato	• Incidence of fruit borer, leaf minor, blight, powdery mildew and blight	Integrated Crop Management
5	Davanagere	Mayakonda Davanagere	Sulthipura Ganganakatte Annapura Kashipura Basavanalu	3	French Bean	• No income in early stage of arecanut • Poor soil health	Utilization of inter space in young arecanut garden.
6	Davanagere	Mayakonda	Anaberu Vitalapura Hedne Nalkunda	2	Coconut	• Coconut Black Headed Caterpillar and Mites • Poor utilization of interspace • Dropping of immature nuts	ICM
7	Davanagere	Mayakonda	Anaberu Vitalapura Hedne Nalkunda	2	Arecanut	• Hidimundige syndrome • Improper nutrient management • Button shedding and nut drop • No proper drainage • No intercrop • Excess application of tank silt • Higher incidence of bacterial leaf stripe	ICM
8	Harihara	Harihara	Belludi	2	Dairy	• Infertility/Repeat breeding & weakness in Crossbred cattle. • Clean and Quality milk production.	Nutrition Management

9	Honnali	Govinakovi	Beejogatti Govinakovi Haralahalli Kuruva Sunkadagatte Arehalli Danihalli Ganganakatte	2	Blackgram	• Improper Nutrient Management • Single crop per year in paddy growing areas • Mono cropping • Micronutrient deficiency	ICM
10	Jagaluru	Bilichodu	Marikunte	1	Maize	• No Intercropping with pulses; • Use of local variety of redgram; • No INM and IPM measures; • Yield loss with sole Maize crop upto 80%; • Fall armyworm incidence.	ICM
11	Channagiri Harihara	Tyavangi Bullapura Kondajji	Tyavangi Bullapura Kondajji	2	Rice	• Non Availability of water for timely operation for Tail enders ; • Higher cost of production; • Poor soil health; • Indiscriminate use of fertilizers	ICM
12	Jagaluru Davanagere Channagiri	Jagaluru Davanagere Tyavanagi	Anaburu Haluvarthy Kittur Tyavangi	1	Finger millet	• No seed treatment with biofertilizers; • Improper spacing; • No INM; • Use of low yielding varieties.	ICM

13	Nyamathi	Nyamathi	Ramehwara	3	Sorghum	• Imbalanced nutrient management; • No soil testing; • Use of local varieties; • No seed hardening • No intercropping	ICM
14	Jagaluru	Bilichodu	Marikunte	1	Tomato	• Calcium deficiency • Wilt • Sucking pests	ICM
15	Jagaluru	Bilichodu	Pallagatte	1	Onion	• Low yield of existing variety, • Incidence of purple blotch, • Non availability of suitable varieties; • Decrease in marketable yield	ICM
16	Davanagere	Anagodu	Haluvarthy	2	Dairy	• Infertility/ Repeat breeding, • Low milk production, • Weakness in dairy animals, • High milk production cost	Dairy Management
17	Jagaluru	Bilichodu	Asagodu	2	Sheep and Goat	• Low production due to worms load and imbalanced feeding	Nutrition Management
18	Davanager	Davanagere	Kundawada Hale Kundawada	3	Fisheries (2018-19)	• Low production.	Production and Management of fishes
19	Channagiri Davanagere Harapanahalli Harihara	Santhebennur Davanagere Telagi Harihara Mallebennur	Thopenahalli Devarahatti Nittur Kundawada Nandyala Guladahalli Jigali Kondajji	2	Fisheries (2017-18)	• Low yield due to Improper stocking & feeding, • Unsuitable species, • Poor pond management	Aquaculture

20	Channagiri	Santhebennur	Nuggehalli	1	Hydroponic	• Green fodder scarcity in summer	Feed and fodder Management
21	Channagiri	Santhebennur	Nithigere Hireuda	1	Redgram	• Low yield • Use of local variety • Incidence of pod borer	ICM
22	Jagaluru	Jagaluru	Rangapura	1	Bengalgram	• No Seed treatment with Bio Fertilizers, • Use of Local varieties, • No INM measures and IPM measures followed	ICM

2.9 Priority thrust areas

S. No	Thrust area
1	Integrated crop management in Rice , Maize, Fingermillet, Sorghum, Blackgram, Redgram, Bengalgram, Tomato, Onion, Coconut and Arecanut
2	Pest and disease management in Rice
3	Varietal assessment in Rice
4	Utilization of interspace in Arecanut
5	Animal nutrition management in Cows, Sheep and Goat
6	Fodder scarcity
7	Integrated Dairy management
8	Calves management
9	Income generation through fisheries

PART III - TECHNICAL ACHIEVEMENTS (2018-19)

3.A. Target and Achievements of mandatory activities

OFT				FLD			
1				2			
OFTs (No.)		Farmers (No.)		FLDs (No.)		Farmers (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
5	1	5	5	11	8	97	94
	3 in progress	12	-		3 in Progress	20	-
	1 Not implemented	3	-		8 (2017-18)	105	105
	1 (2017-18)	4	4	3 (NFSM)	2	115	115
					1 in progress	25	25
					1 (2017-18)	50	39

Training				Extension Programmes			
3				4			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
34	95	1262	3329	877	809	28620	53276

Seed Production (Q)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
8	8.44	2000	13795

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
5000	6270	50	944

3.B1. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
													No.	Kg
1	Varietal Assessment in Onion	Onion	• Non availability of suitable varieties for Rabi season	Assessment of Onion varieties of Rabi season	-	1	-	-	08	0.015	-	-	-	-
2	Animal nutrition	Dairy	• Generally dairy animals are fed with poor quality dry roughages along with a few feed ingredients. These fodders when fed to high yielding dairy animals would not support production and health due to deficiency of Protein, energy & minerals. Poor quality dry roughages when enriched with urea and fed along with Grain mixture (starch) improved the digestibility of dry roughages and supplied the crude protein &Energy(TDN) required by the animal	Effect of feeding urea-treated paddy straw along with grain mixture in dairy animals.	-	1	-	-	04	-	-	-	_	-

3	IPDM	Rice	• 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, • 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		Integrated pest and disease management in Rice	2	-	-	-	-	-	-	*Pseudomonas fluorescence*	50

	ICM	Fingermillet	•No seed treatment with biofertilizers; • Improper spacing; • No INM; • Use of low yielding varieties.	_	Integrated Crop Mananmgnent practices in High yielding variety and Drought tolerant Finger Millet (ML-365)	03	-	-	1.25	-	-	-	*Azosprillum, PSB*	50
	ICM	Sorghum	•Imbalanced nutrient management; • No soil testing; • Use of local varieties; • No seed hardening • No intercropping	-	Integrated Crop Management in Sorghum	01	-	-	06	0.3	_	-	_	-
4	ICM	Tomato (2017-18)	•Incidence of fruit borer, leaf minor, blight, powdery mildew and blight	-	ICM in Tomato	01	-	-	05	0.004	-	-	*Trichoderma harziannum*	2
	ICM	Tomato (2018-19)	• Calcium deficiency • Wilt • Sucking pests	-	ICM in Tomato	02	-	-	-	-	-	-	Arka Microbial Consortium	28
5	Utilization of inter spacing in young arecanut garden	French Bean	•No income in early stage of arecanut •Poor soil health	-	Income generation through french bean in young arecanut garden	02	-	-	07	0.5	-	-	*PSB & Rhizobium*	15
6	ICM	Coconut	•Coconut Black Headed Caterpillar and Mites • Poor utilization of interspace • Dropping of immature nuts	-	Integrated Crop Management in Coconut	03	-	-	07	-	-	-	*Trichoderma harziannum*	2
7	ICM	Arecanut	•Hidimundige syndrome • Improper nutrient management • Button shedding and nut drop • No proper drainage • No intercrop • Excess application of tank silt • Higher incidence of bacterial leaf stripe	-	Integrated Crop Management in Arecanut	03	-	-	09	-		-	*Trichoderma harziannum*	5

8	Nutrition Management	Dairy	• Infertility/Repeat breeding & weakness in Crossbred cattle. • Clean and Quality milk production.	-	Care and Management of Pregnant cows during dry period (Advanced pregnancy) and scientific management in rasing crossbred calves.	02	-	-	04	-	-	-	-	-
9	ICM	Blackgram	• Improper Nutrient Management • Single crop per year in paddy growing areas • Mono cropping • Micronutrient deficiency	-	Integrated Crop Management in Bengalgram	02	-	-	10	05	-	-	-	-
10	ICM	Maize	• No Intercropping with pulses; • Use of local variety of redgram; • No INM and IPM measures; • Yield loss with sole Maize crop upto 80%; Fall armyworm incidence.	-	Integrated Crop Management Practices in Maize +Redgram (BRG-5)	04	-	-	14	0.75	-	-	*Rhizobium and PSB*	50
11	ICM	Rice	• Non Availability of water for timely operation for Tail enders ; • Higher cost of production; • Poor soil health; • Indiscriminate use of fertilizers	-	Integrated Crop Manamgnemnt in Direct Dry seeded Rice (DSR)	07	-	-	35	0.1	-	-	*Azosprillum, PSB*	10

	ICM	Redgram (NFSM)	• Low yield • Use of local variety • Incidence of pod borer	-	Integrated crop management in Redgram	06	-	_	11	250	-	-	*Trichoderma harziannum*	62
	ICM	Bengalgram (NFSM)	• No Seed treatment with Bio Fertilizers, Use of Local varieties, No INM measures and IPM measures followed	-	Integrated Crop Management in Bengal gram	05	-	-	15	-	-	-	*Trichoderma harziannum*	50
	ICM	Onion	• Low yield of existing variety, incidence of purple blotch, non availability of suitable varieties; decrease in marketable yield	-	Integrated Crop Management in onion	01	-	-	8.25	-	-	-	-	-
	Dairy Management	Dairy	• Infertility/ Repeat breeding, • Low milk production, • Weakness in dairy animals, & high milk production cost	-	Integrated Management of Dairy Animals	01	-	-	03	-	-	-	-	-
	Feed and fodder Management	Hydroponic	• Green fodder scarcity in summer	-	Hydroponic Sueper fodder Production to alleviate the fodder scarcity	01	-	-	03	-	-	-	-	-
	Nutrition Management	Sheep and Goat	• Low production due to worms load and imbalnced feeding	-	Total Deworming and Balanced Nutrition in small Ruminants	02	-	-	05	-	-	-	-	-

	Production and Management of fishes	Fishereis (2018-19)	• Low Production	-	Rearing of carp fry in Jumbo Hapas as an entrepreneurshipfor better profitability	01	-	-	14	-	-	40,000 Fish fry	–	-
	Aquaculture	Fishereis (2017-18)	• Low yield due to Improper stocking & feeding, Unsuitable species, Poor pond management	-	Integrated Management of composite Fish culture in ponds	02	-	-	07	-	-	20000 Fish seeds	-	-

3.B2. Details of technology used during reporting period

1. 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
1	Assessment of Onion varieties of Rabi season	IIHR, Bengaluru DORG, Pune NHRDF, Nasik	Onion	1	-	1	8

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
3	1	-	-	-	-	-	-	8	2	-	-	35	4	-	-

2. 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
2	Effect of feeding urea- treated paddy straw along with grain mixture in dairy animals.	KVA & FSU, Bidar NDRI, Karnal	Dairy	1		1	04

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5	-	-	-	-	-	-	-	16	-	-	-	31	-	-	-

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		1	2	9

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	20	5	-	-	33	-	11	-	123	-	31	-

4. 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
3	Integrated Crop Mananmgnent practices in High yielding variety and Drought tolerant Finger Millet (ML-365)	UAS, Bengaluru	Finger Millet	-	01	03	11

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	20	01	03	01	58	09	18	01	132	09	46	-

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
3	Integrated Crop Management in Sorghum	UAS, Dharwad	Sorghum	-	01	01	06

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	08	02	-	-	14	-	03	-	113	-	08	-

6. Tomato

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 Tomato	IIHR, Bengaluru	Tomato	-	01	01	05

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	13	-	02	-	12	-	9	-	25	-	18	-

7. Tomato

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 Tomato	IIHR, Bengaluru	Tomato	-	01	02	12

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	10	-	-	-	32	-	-	-	160	05	02	-

8. Tomato

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 Tomato	IIHR, Bengaluru	Tomato		01	02	12

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	10	-	-	-	32	-	-	-	164	05	05	-

9. 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
4	Integrated Crop Management in Onion	AICRP on Onion and Garlic,RC,Hiriyur	Onion	-	01	01	09

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	04	01	-	-	08	-	-	-	38	-	-	-

10. Frech Bean

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	Income generation through french bean in young arecanut garden	IIHR, Bengaluru	French Bean	-	01	02	07

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities))			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

-	-	-	-	09	01	-	-	21	-	07	-	97	8	20	-

11. Coconut

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 Coconut	UHS, Bagalakote	Coconut	-	01	03	08

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	09	01	09	01	82	-	43	99	99	-	40	-

12. Arecanut

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 Arecanut	UHS, Bagalakote	Arecanut	-	01	03	10

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	12	02	05	01	82	-	43	-	103	-	48	-

13 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
7	Care and Management of Pregnant cows during dry period (Advanced pregnancy) and scientific management in rasing crossbred calves.	KVA & FSU, Bidar	Dairy	-	01	02	04

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	15	-	-	-	38	-	-	-	50	-	-	-

14. 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
7	Integrated Management of Dairy Animals	KVA & FSU, Bidar	Dairy	-	01	01	03

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	09	01	-	-	14	-	-	-	39	02	-	-

15. Hydroponic

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	Hydroponic Sueper fodder Production to alleviate the fodder scarcity	NIANP, Bengaluru	Hydroponic	-	01	01	03

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	-	05	-	-	01	05	-	-	04	18	-	-

16. Sheep and Goat

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
	Total Deworming and Balanced Nutrition in small Ruminants	KVA & FSU, Bidar	Sheep and Goat	-	01	02	05

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	05	-	-	-	13	-	-	-	32	-	-	-

17. 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
8	Integrated crop management in Blackgram	UAS, Dharwad	Blackgram	-	01	02	101

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	34	05	-	-	30	-	4	-	140	-	03	-

18. 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
8	Integrated crop management in Benglgram -NFSM	JNKVV & ICRISAT	Bengalgram	-	01	05	15

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	27	-	12	01	141	03	36	-	346	08	114	-

19. 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
8	Integrated Crop Management Practices in Maize +Redgram (BRG-5)	UAS, Bengaluru	Maize		01	04	14

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	21	04	05	-	71	08	14	-	242	17	47	-

20. 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
9	Integrated Crop Manamgnemnt in Direct Dry seeded Rice (DSR)	UAS, Bengaluru	Rice	-	01	07	35

3.B2 contd..

No. of farmers covered							
OFT		FLD		Training		Others (Extension Activities)	
General	SC/ST	General	SC/ST	General	SC/ST	General	SC/ST

M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	05	-	-	-	150	-	30	-	565	134	193	23

21. Rice

1	2	3	4	5	6	7	8
9	Integrated Crop Manamgnemnt in Direct Dry seeded Rice (DSR)	UAS, Bengaluru	Rice	-	01	07	35

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	05	-	-	-	150	-	30	-	565	134	193	23

22. Fishries

Fishries 2017-18)

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
	Integrated Management of composite Fish culture in ponds	KVA & FSU, Bidar	Fishries	-	01	02	07

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extesnion Activities))			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	09	-	01	-	09	-	01	-	147	23	33	08

23. Redgram –NFSM

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
	Integrated crop management in Redgram	UAS, Bengaluru	Redgram	-	01	06	11

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extesnion Activities))			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	41	02	07	-	160	11	04	01	220	04	46	-

24. Bengalgram-NFSM

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 Benglgram -NFSM	JNKVV & ICRISAT	Bengalgram	-	01	05	15

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Extension Activities)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	27	-	12	01	141	03	36	-	346	08	114	-

25. Fishries

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
	Rearing of carp fry in Jumbo Hapas as an entrepreneurshipfor better profitability	UAHS, Shivamogga	Fishries	-	01	01	14

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

-	-	-	-	**01**	-	**01**	-	**01**	-	**01**	-	**13**	-	**13**	-	

PART IV - On Farm Trial (2018-19)

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										
Varietal Evaluation					**1**					
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					**1**					

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	01					01
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	01					01

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					
Varietal Evaluation	Onion	Assessement of Onion varieties for Rabi season	4	4	0.8
Integrated Pest Management					
Integrated Crop Management					

Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

4.B.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					
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	Dairy	Effect of feeding urea-treated paddy straw along with grain mixture in dairy animals.	5	5
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

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	• Non availability of suitable verifiers for Rabi season	Assessment of Onion varieties for Rabi seasons	4	T.O.1 (Farmers practice): Nyamathi Local	-	156.5	q/ha	• Germination (%): 88 • Plant Height (cm): 42 • No. of leaves /plant (No.): 6.33 • Pseudo stem lengh (cm): 3.93 • Incidence of trips (%): 7	86121	1.84	
					T.O.2: Arka Nikethan	IIHR, Bengaluru	281.7	q/ha	• Germination (%): 92 • Plant Height (cm); 43.93 • No. of leaves /plant (No.); 7 • Pseudo stem lengh (cm): 4.05 • Incidence of trips (%): 5.5	232937	3.19	
					T.O.3: Bhima Shakthi	DORG, Pune	317	q/ha	• Germination (%): 90 • Plant Height (cm): 46.69 • No. of leaves /plant (No.): 7.67 • Pseudo stem lengh (cm):5.15 • Incidence of trips (%): 4	275290	3.61	

					T.O.4: NHRDF Red (Line 28)	NHRDF, Nasik	263	q/ha	• Germination (%): 86 • Plant Height (cm): 46.18 • No. of leaves /plant (No.): 7.33 • Pseudo stem lengh(cm): 4.96 • Incidence of trips (%): 6.5	209160	2.97	
Dairy		• Generally dairy animals are fed with poor quality dry roughages along with a few feed ingredients. These fodders when fed to high yielding dairy animals would not support production and health due to deficiency of Protein, energy & minerals. Poor quality dry roughages when enriched with urea and fed along with Grain mixture (starch) improved the digestibility of dry	Effect of feeding urea-treated paddy straw along with grain mixture in dairy animals.	5	T.O.1: (Farmers practice): Feeding dairy animals with low quality dry roughages and non-leguminous green fodders along with cake & bran items	-	1955.4	L/Lactation	• Milk quality (CLR): 1.025 • Feeding cost (Rs. /lactation / animal): 37210 • Cost of milk production (Rs./L):19.18	11675	1.31	

		roughages and supplied the crude protein &Energy(TDN) required by the animal.										
					T.O. 2 Feeding dairy animals with urea-treated dry roughages, green fodders and compounded animal feeds as per the NRC specifications	KVA & FSU, Bidar	2577.6	L/ Lactation	• Milk quality (CLR): 1.027 • Feeding cost (Rs. /lactation / animal): 34465 • Cost of milk production (Rs./L):13.62	29975	1.86	
					T.O. 3 Feeding dairy animals with urea-treated dry roughages, green fodders and compounded animal feeds as per the NRC specifications. PLUS using 1-2 kg grain mixture at the time of feeding urea-treated dry roughages	NDRI, Karnal	2647.6	L / lactation	• Milk quality (CLR): 1.028 • Feeding cost (Rs. /lactation / animal): 31720 • Cost of milk production (Rs./L): 12.29	34470	2.08	

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

1. Onion

1. **Title of Technology Assessed :** Assessment of Onion varieties for Rabi season.
2. **Performance of the Technology on specific indicators:** Bhima Shakthi variety performed better in Rabi season.
3. **Specific Feedback from farmers:** Happy with technology and need continues supply of seed every year.
4. **Specific Feedback from Extension personnel and other stakeholders:** Bhima Shakthi variety can be taken up for mass adoption.
5. **Feedback to Research System based on results and feedback received**: Variety which can stand long dry spell needed and also resistant to sucking pest.

2. Dairy:

1. **Title of Technology Assessed** : Effect of feeding urea- treated paddy straw along with grain mixture in dairy animals.
2. **Performance of the Technology on specific indicators:** Intake of fodder was more in technology option 2 and 3.
3. **Specific Feedback from farmers:** Easy to practice and animal likes enriched dry fodder. Good idea to avoid fodder wastage and beneficial to farmers.
4. **Specific Feedback from Extension personnel and other stakeholders:** Technology can be taken up for mass adoption
5. **Feedback to Research System based on results and feedback received:** Fodder blocks making is convent. Dry fodders should be enriched at the time of harvesting and kept for use. Technological product is required for this feeding practice.

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 (Farmers practice)							
					T.O.2							
					T.O.3							

4.D.2. Details of Technologies refined:

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

PART V - FRONTLINE DEMONSTRATIONS (2018-19)

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
	Oilseeds													
	Pulses													
	Blackgram	Irrigated	Summer 2017-18	Blackgram	DBGV-5	-	ICM	• 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	20	20	-	39	25	14
	Redgram	Rainfed	Kharif 2018-19	Redgram	BRG-5	-	ICM	•Use of BRG-5 medium duration wilt resistant variety •Trichoderma harziannum @10 ml/l. • Spray with microla @ 5ml/l (micro nuitrint mixture from RCF Ltd), • Sprey with Zincob micro nutrient mixture @ 5ml/l* Installation of Pheromone traps @ 8no. / ha(16 lures), • Spray with Profenophos @ 2ml/l- ovicidal- 1 l/ha, • Spray with Chlorantriniprole	20	20	07	43	31	19

								insecticide @ 0.3ml/l,						
	Benglgram	Rainfed	Rabi 2018-19	Bengalgram	JAKI-9218	-	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,spraying of Chlorantriniprole @ 75 ml / ha	10	16	12	28	31	09
	Cereals													
	Rice	Irrigated	Summer 2017-18	Rice	Kaveri Sona	-	IPDM	• 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, • Soil application of Pseudomonas fluorescence @5kg/ha at 30 DAT • Installation of funnel traps @10/ha,	10	10	-	25	15	10

								• 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						
	Rice	Irrigated	Kharif 2018-19	Rice	JGL-Sona	-	ICM	• Seeds 12kg/acre • . Mechansised sowing (Seed Cum fertliser drill) • .Pre –Emergent Weedicide (2-3 DAS)- Pendimethilin 30EC 0.5l • .Post –Emergent Weedicide Bispyriback Sodium 100 SC – (Grasses and Sedges) 100ml + Metsulfuron 20 WP 8g (Broad leaf) 15-20 DAS • .Plant protection Measure: Installation of pheromone traps 4 no./acre (lures) against army worm • Micro Nutrient application (Zn and Fe)-	02	02	-	05	02	03
	Maize	Rainfed	Kharif 2018-19	Maize	-	Private	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	12	12	5	25	20	10

								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); • 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 .						
	Sorghum	Rainfed	Rabi 2018-19	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; • 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	04	04	-	10	07	03
	Millets													
	Fingermillet	Rainfed	Kharif 2018-19	Fingermillet	ML 365	-	ICM	• Variety ML-365 (105-110 days).; • Soil test based nutrient application; • Seed treatment with bio fertilizers Azosprillium, PSB, VAM @ 3 kg/ha; • Spraying of Micronutrient –(3-4 ml/l) ZnSO4;	10	10	04	21	18	07

								• Use of water soluble fertilizers (tillering stage) 13:00:45 (5g /l).						

	Vegetables												
	Tomato (2017-18)	Irrigated	Rabi-2017-18	Tomato	-	Arka Samart	ICM	• Use of Marigold as a trap crop (16:1),Application of Trichoderma harzianum @ 5kg /ha through FYM, • Application of Neem cake @ 250kg /ha after 20-25 DAT, • Use of yellow and blue sticky traps @ 25/ha, • Use of Pheromone traps @ 10/ha, • Need based plant protection measures, • Spray with Hexaconozol @1ml/l (Powdery mildew), Imidacloprid @ 0.4 ml/l (Leaf minor) and Dimethomorph @ 1g/l (Blight)	06	06	02	13	10	05
	Tomato (2018-19)	Irrigated	Kharif 2018-19	Tomato	-	Shivam (Hyveg)	ICM	• Soil test based nutrient application; • Use of Marigold as a trap crop (16:1) • Application of Arka Microbial Consortium (20 g for seed treatment, 20g/l – drenching 10 DAT, 5kg- Main field along with vermicompost); • Spray of vegetable special @ 5g/l; • Spray of calcium nitrate @5g/l; • Use of yellow and blue sticky traps @ 25/ha; • Use of pheromone traps @ 10/ha; • Need based plant protection measures	04	04	-	10	06	04
	Onion	Irrigatd	Kharif 2018-19	Onon	Bhima super	-	ICM	Bhima Super	1	1	0	5	2	3

	French Bean	Irrigated	Kharif 2017-18	French Bean	Arka Sharth	-	Income generation through utilization of inter space in Arecanut	• Introduction of variety arka sharath; • Seed treatment with Rhizobium, PSB and VAM @ 200g/acre; • Spraying pulse magic; • Spraying of Imidachloprid 17 SL- @ 0.5ml/l to manage sucking pest; • Spraying of Hexaconazole @ 1ml/l to manage powdery mildew; • Weed and water management	2	2	1	9	7	3
	Flowers													
	Ornamental													
	Fruit													
	Spices and condiments													
	Commercial													
	Medicinal and aromatic													

	Fodder												
	Hydroponic	Homestead	Summer	Hydroponic	Sprouts	-	Feed and fodder Management	• Production of Fodder in Plastic Trays	-	-	-	05	04	01
	Plantation												
	Coconut	Irrigated	Kharif 2017-18	Coconut	Arasikdere tall	-	ICM	• Based on soil test results recommonded dose of fertilizer applicatio (170:120:400 g N: P2o5: K2o/plant/year), • . Use of Trichoderma harzianum @ 50 g/plant, • Borax application based on soil test result (50g/plant), • Sunhemp @ 40 kg/ha, • Mgso4 @ 500g/plant, • Release of Goiniozus nephantidis @ 12/palm. • Application of neem cake @ 5 km/palm. 7. Root feeding with econeem plus @ 10 ml/palm.	8	8	10	10	14	06
	Arecanut	Irrigated	Kharif 2017-18	Arecanut	Channagiri Local	-	ICM	• Based on soil test result recommonded dose of fertilizers (100:40:140 g N p2o5 k2o/plant/year), • use of Trichoderma harzianum, • Borax application based on soil test result (20 g/plant), • Soil fertility enrichment with Sunhemp, • Spreying with Dimethoate(2ml/l) and COC (3g/l)	8	8	06	14	15	05
	Fibre													

	Dairy												
	Cows	Homestead	Kharif 2017-18	Dairy	HF/Jersey X	-	Nutrition Management	• Feeding of crossbred dairy cows based on the feeding standards (Booster Feeding). • Contolling of parasitic infestations (Total Deworming). • Feedning of colostrums and milk to calves based on the body weight (Scientific rearing of calves)	15 Animals	15 Animal	-	15	08	07
	Dairy	Homestead	Kharif 2017-18	Dairy	HF X cow	-	Nutition Manageemnt	• Benefits of Deworming • Use of Trace minerals in alleviating Infertility/ repeat breeding problems • Enrichment of low quality feeding stuffs • Benefits of silage use.	10 Animals	10 Animal	-	10	06	04
	Poultry												
	Rabbitry												
	Piggery												
	Sheep and goat												
	Sheep and goat	Homestead	Rabi 2018-19	Sheep and Goat	Local (Bellary x)	-	Nutrition Management	•Total Deworming and Balanced Feeding as per NRC standards.	50 Sheep	50 Sheep	-	05	02	03
	Duckery												

	Common carps												
	Fishreis (2017-18)	Irrigated	Rabi 2017-18	Fishries	*Catla catla, Labeo rohita, Amur Cyprinus carpio, Pangassius sp., Ctenophary ngodon idella*	-	Aquaculture	• Pond preparation & management; • Seed selection and stocking; • Feed and feeding management; • Health and water quality monitoring • Harvesting	10 units	10 Units	01	09	07	03
	Fishreis (2018-19)	Irrigated	Kharif 2018-19	Fishries	*Cattla, Common carp*	-	Production and Management of fishes	• Stocking of bigger size fingerlings	2	2	01	01	01	01
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
	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	
	Oilseeds												
	Pulses												
	Blackgram	Irrigated	Summer 2017-18	Blackgram	DBGV-5	-	ICM	• 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	Summer 2017-18	L	H	M	Rice
	Redgram	Rainfed	Kharif 2018-19	Redtram	BRG-5	-	ICM	• Use of BRG-5 medium duration wilt resistant variety • Trichoderma harziannum @10 ml/l. • Spray with microla @ 5ml/l (micro nuitrint mixture from RCF Ltd), • Sprey with Zincob micro nutrient mixture @ 5ml/l* Installation of Pheromone traps @ 8no. / ha(16 lures), • Spray with Profenophos @ 2ml/l- ovicidal- 1 l/ha, • Spray with Chlorantriniprole insecticide @ 0.3ml/l,	Kharif 2018-19	L	M	M	Maize
	Benglgram	Rainfed	Rabi-2018-19	Benglgram	JAKI-9218	-	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,spraying of Chlorantriniprole @ 75 ml / ha	Rabi-2018-19	L	M	L	Fallow

	Cereals											
	Rice	Irrigated	Kharif 2017-18	Rice	JGL-1798	-	IPDM	• 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, • 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	Kharif 2017-18	L	M	L	Rice
	Rice	Irrigated	Kharif 2018-19	Rice	JGL-Sona	-	ICM	• Seeds 12kg/acre • Mechansised sowing (Seed Cum fertliser drill) • .Pre –Emergent Weedicide (2-3 DAS)-Pendimethilin 30EC 0.5l • .Post –Emergent Weedicide Bispyriback Sodium 100 SC –(Grasses and Sedges) 100ml + Metsulfuron 20 WP 8g (Broad leaf) 15-20 DAS • .Plant protection Measure: Installation of pheromone traps • No./acre (lures) against army worm • . Micro Nutrient application (Zn and Fe)-	Kharif 2018-19	L	M	M	Rice
	Maize	Rainfed	Kharif-2018-19	Maize	-	Private	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); • 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.	Kharif-2018-19	L	M	M	Maize sole crop

	Sorghum	Rainfed	Rabi-2018-19	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; • 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	Rabi-2018-19	L	M	M	Onion
	Millets												
	Fingermillet	Rainfed	Kharif 2018-19	Fingermillet	ML-365	-	ICM	• Variety ML-365 (105-110 days).; • Soil test based nutrient application; • Seed treatment with bio fertilizers Azosprillium, PSB, VAM @ 3 kg/ha; • Spraying of Micronutrient –(3-4 ml/l) ZnSO4; • Use of water soluble fertilizers (tillering stage) 13:00:45 (5g /l).	Kharif 2018-19	L	M	M	Maize
	Vegetables												
	Tomato (2017-18)	Irrigated	Kharif 2017-18	Tomato	-	Arka smart	ICM	• Use of Marigold as a trap crop (16:1),Application of Trichoderma harzianum @ 5kg /ha through FYM, • Application of Neem cake @ 250kg /ha after 20-25 DAT, • Use of yellow and blue sticky traps @ 25/ha, • Use of Pheromone traps @ 10/ha, • Need based plant protection measures, • Spray with Hexaconozol @1ml/l (Powdery mildew), Imidacloprid @ 0.4 ml/l (Leaf minor) and Dimethomorph @ 1g/l (Blight)	Kharif 2017-18	L	M	L	Tomato
	Tomato (2018-19)	Irrigated	Kharif 2018-19	Tomato	-	Shivam (Hyveg)	ICM	• Soil test based nutrient application; • Use of Marigold as a trap crop (16:1) • Application of Arka Microbial Consortium (20 g for seed treatment, 20g/l – drenching 10 DAT, 5kg- Main field along with vermicompost); • Spray of vegetable special @ 5g/l; • Spray of calcium nitrate @5g/l; • Use of yellow and blue sticky traps @ 25/ha; • Use of pheromone traps @ 10/ha; • Need based plant protection measures	Kharif 2018-19	L	L	H	Maize
	Onion	Irrigated	Kharif 2018-19	Onion	Bhima super	-	ICM	• Bhima super varity	Kharif 2018-19	M	M	M	Maize

	French Bean	Irrigated	Kharif 2017-18	French Bean	Arka Sharth	-	Income generation through utilization of inter space in Arecanut	• introduction of variety arka sharath; • Seed treatment with Rhizobium, PSB and VAM @ 200g/acre; • Spraying pulse magic; • Spraying of Imidachloprid 17 SL- @ 0.5ml/l to manage sucking pest; • Spraying of Hexaconazole @ 1ml/l to manage powdery mildew; • Weed and water management	Kharif 2017-18	L	H	L	-
	Flowers												
	Ornamental												
	Fruit												
	Spices and condiments												
	Commercial												
	Medicinal and aromatic												
	Fodder												
	Plantation												
	Coconut	Irrigated	Kharif 2017-18	Coconut	Arasikere tall	-	ICM	• 1. Based on soil test results 66ecommended dose of fertilizer 66ecommended (170:120:400 g N: P2o5: K2o/plant/year), • . Use of Trichoderma harzianum @ 50 g/plant, • . Borax application based on soil test result (50g/plant), • Sunhemp @ 40 kg/ha, • Mgso4 @ 500g/plant, • Release of Goiniozus nephantidis @ 12/palm. • Application of neem cake @ 5 km/palm. 7. Root feeding with econeem plus @ 10 ml/palm.	Kharif 2017-18	L	M	M	Coconut
	Arecnaut	Irrigated	Kharif 2017-18	Arecanut	Channagiri Local	-	ICM	• Based on soil test result 66ecommended dose of fertilizers (100:40:140 g N p2o5 k2o/plant/year), • . Use of Trichoderma harzianum, • Borax application based on soil test result (20 g/plant), • . Soil fertility enrichment with Sunhemp, • Spreying with Dimethoate(2ml/l) and COC (3g/l)	Kharif 2017-18	L	M	M	Arecnaut
	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																			
Pulses																			
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	DBGV-5	-	Irrigated	50	20	8.47	4.32	6.7	5.84	14.72	15800	23443	7643	1.48	14820	20426	5606	1.37
Redgram	• Use of BRG-5 medium duration wilt resistant variety • Trichoderma harziannum @10 ml/l. • Spray with microla @ 5ml/l (micro nuitrint mixture from RCF Ltd), • Sprey with Zincob micro nutrient mixture @ 5ml/l • Installation of Pheromone traps @ 8no. / ha(16 lures), • Spray with Profenophos @ 2ml/l- ovicidal- 1 l/ha, • Spray with Chlorantriniprole insecticide @ 0.3ml/l,	BRG-5	-	Rainfed	50	20	13.9	9.7	11.86	9.28	20.78	21322	47456	26134	2.24	20338	37128	16790	1.83
Benglgram	• 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,spraying of Chlorantriniprole @ 75 ml / ha	JAKI-9218	-	Rainfed	40	16	12.25	07	9.71	7.93	22.44	23926	53405	29479	2.23	23969	43628.8	19660	1.82

Cereals																			
Rice	• 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, • 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	Kaveri Sona	_	Irrigated	25	10	71.5	58.9	66.5	60.07	10.7	58475.2	133008	74532.8	2.28	64094	120120	56026	1.88
Rice	• Seeds 12kg/acre • . Mechansised sowing (Seed Cum fertliser drill) • .Pre –Emergent Weedicide (2-3 DAS)- Pendimethilin 30EC 0.5l • .Post –Emergent Weedicide Bispyriback Sodium 100 SC – (Grasses and Sedges) 100ml + Metsulfuron 20 WP 8g (Broad leaf) 15-20 DAS • .Plant protection Measure: Installation of pheromone traps 4 no./acre (lures) against army worm • Micro Nutrient application (Zn and Fe)-	JGL-Sona	-	Irrigated	05	02	64.5	58.75	61.45	61.9	-0.72	45600	110610	65010	2.43	67900	111420	43520	1.64

Maize	• 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); • 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 ,	-	Private	Rainfed	30	12	53.54	35.13	45.22	36.55	23.72	41947.5	81402.6	39455.1	1.94	42012.7	65790	23777.3	1.57
Sorghum	• Variety SPV-2217; • Seed treatment with calcium chloride to induce drought tolerance (overnight soaking); • Seed treatment with Azotobactor, PSB @ 500g/ha; • 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	SPV-2217	-	Rainfed	10	04	17.31	13.96	16.11	13.93	15.65	15821	29005.2	13184.2	1.83	14385	25074	10689	1.74
Millets																			
Fingermillet	• • Variety ML-365 (105-110 days).; • Soil test based nutrient application; • Seed treatment with bio fertilizers Azosprillium, PSB, VAM @ 3 kg/ha; • Spraying of Micronutrient –(3-4 ml/l) ZnSO4; • Use of water soluble fertilizers (tillering stage) 13:00:45 (5g /l).	ML-365	-	Rainfed	25	10	14.5	7.4	12.8	11.35	12.77	26234.4	44961.2	26167.3	1.71	26234.4	40441	14206.6	1.54

Vegetables																			
Tomato (2017-18)	• Use of Marigold as a trap crop (16:1),Application of Trichoderma harzianum @ 5kg /ha through FYM, • Application of Neem cake @ 250kg /ha after 20-25 DAT,• Use of yellow and blue sticky traps @ 25/ha, • Use of Pheromone traps @ 10/ha,• Need based plant protection measures, • Spray with Hexaconozol @1ml/l (Powdery mildew), Imidacloprid @ 0.4 ml/l (Leaf minor) and Dimethomorph @ 1g/l (Blight)	-	Arka Smart	rrigated	15	6	79.05	53.82	66.17	55.75	18.69	633324.9	132349	69024	2.1	69101.1	111500	42398.9	1.62
Tomato (2018-19)	• Soil test based nutrient application; • Use of Marigold as a trap crop (16:1) • Application of Arka Microbial Consortium (20 g for seed treatment, 20g/l – drenching 10 DAT, 5kg- Main field along with vermicompost); • Spray of vegetable special @ 5g/l; • Spray of calcium nitrate @5g/l; • Use of yellow and blue sticky traps @ 25/ha; • Use of pheromone traps @ 10/ha; • Need based plant protection measures	-	Shivam (Hyveg)	Irrigated	10	04	68.05	55.49	61.14	55.21	10.74	64447.6	91708.5	27260.9	1.43	68378.4	82824	14445.6	1.21
French Bean	• ntroduction of variety arka sharath; • Seed treatment with Rhizobium, PSB and VAM @ 200g/acre; • Spraying pulse magic; • Spraying of Imidachloprid 17 SL- @ 0.5ml/l to manage sucking pest; • Spraying of Hexaconazole @ 1ml/l to manage powdery mildew; • Weed and water management	Arka Sharath	-	Irrigated	10	2	124.2	48.4	102.44	87.02	17.72	44370	122928	78558	2.78	44470	104424	59954	2.34

Onion	Bhima super variety	Bhima super	-	Irrrigated	05	1	225	204	212.4	152.6	39.18	106688	318600	211912	2.99	120765	228900	108135	1.9
Flowers																			
Ornamental																			
Fruit																			
Spices and condiments																			
Commercial																			
Fibre crops like cotton																			
Medicinal and aromatic																			
Fodder																			
Plantation																			
Coconut	• Based on soil test results recommonded dose of fertilizer applicatio (170:120:400 g N: P2o5: K2o/plant/year), •. Use of Trichoderma harzianum @ 50 g/plant, • Borax application based on soil test result (50g/plant), • Sunhemp @ 40 kg/ha, 5. Mgso4 @ 500g/plant, • Release of Goiniozus nephantidis @ 12/palm. • Application of neem cake @ 5 km/palm. • Root feeding with econeem plus @ 10 ml/palm.	Arasikere tall	-	Irrigated	20	08	12832	15382	14312.1	8528.2	67.82	57124.2	171744.6	114620.4	3.03	34533.8	102338	67804.6	2.98
Arecanut	• Based on soil test result recommonded dose of fertilizers (100:40:140 g N p2o5 k2o/plant/year), •. use of Trichoderma harzianum, • Borax application based on soil test result (20 g/plant), • Soil fertility enrichment with Sunhemp, • Spreying with Dimethoate(2ml/l) and COC (3g/l)	Channagiri Local	-	Irrigated	20	8	26.3	20.6	22.96	14.74	55.76	189187.6	640920	451732.5	3.39	161551.2	412721.5	251170.3	2.56
Fibre																			
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 – 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**
Rice	**Incidence of blast (%)**	**5.78**	**14.08**
	Incidence of Sheath Blight (%)	6.14	12.63
	Incidence of BPH (%)	5.86	16.09
	Incidence of stem borer	4.72	11.87
Rice	Plant Height (cm)	106.06	105.04
	Tillers per Hill (No.)	58.8	58.8
	Test weight (g)	36.84	36.96
Maize	Plant Height (cm)	185.8	183.4
	Pods per plant (Redgram) (No.)	70.58	66.98
	Incidence of wilt (%)	3.73	9.65
Fingermillet	Plant Height (cm)	67.08	65.18
	Tiller per hill (No.)	5.82	3.82
	Fodder yield (t/ha)	5.82	3.82
Sorghum	Plant Height (cm)	194.8	207.8
	Head size (cm)	22.36	19.65
	Test weight (g)	40.66	38.47
Tomato (2017-18)	No. of fruits per plantd (No.s)	38.66	36.2
	Incidence of fruit borer (%)	5.08	14.25
	Incidence of leaf curl (%)	5.41	17.28
	Incidence of powdery mildew	9.54	19.91
Tomato (2018-19)	Fruits (No.)	40.7	38.4
	Incidence of fruit borer (%)	5.17	14.27
	Incidence of leaf curl (%)	5.55	17.72
Onion	Germination (%)	90.4	84.2
	Weight of Bulbs (g)	108.4	85.6
French Bean	Pods per plant (No.)	38.6	33.6
	Organic Carbon in soil (%)	0.712	0.696
Coconut	Incidence of mites (%)	6.45	24.3
	Incidence of CBHC (%)	12.35	14.85
Arecanut	Inflorescence (No.)	5.95	3.5
	Button Shedding (%)	7.65	21.1
Blackgram (2017-18)	Pods per plant (No,)	21.0	19.43
	Test Weight (g)	40.03	37.67
Redgram	Plant Height (cm)	176.06	169.34
	No. of pods per plant (No)	93.1	76.18
	Incidence of pod borer (%)	6.72	12.58
	Incidence of wilt (%)	4.24	7.38
Benglgram	Plant Height (cm)	29.97	26.18
	No. of pods per plant (No)	59.69	46.83
	Incidence of wilt (%)	3.95	10.35

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																	
Cows	• Care and Management of Pregnant cows during dry period (Advanced pregnancy) and scientific management in rasing crossbred calves.	HF/Jersey X	15	15	3965	1617	2731.48	1688	61.81	37193	68286.7	31093.67	1.84	29890	42200	12310	1.41
Dairy	• Benefits of Deworming • Use of Trace minerals in alleviating Infertility/ repeat breeding problems • Enrichment of low quality feeding stuffs • Benefits of silage use.	HF X	10	10	3560 L	1580 L	2692.3 L	2331.1 L	15.48	37210	67307.5	30097.5	1.81	39650	58280	18630	1.47
Hydroponic	• Production of Fodder in Plastic Trays	-	05	05	3355 L/Lactation	2593 L/Lactation	2958.8	2440	21.26	36600	73970	37370	2.02	33550	61000	27450	1.81
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat	• Total Deworming and Balanced Feeding as per NRC standards.	Local (Bellary x)	05	50 Sheep	75	66	69.2	53	30.56	10250	20760	10510	2.02	9000	15900	6900	1.76
Duckery																	
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

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**
Cow- Average body weight (kg)	**28.4**	**24**
Dairy- Specific gravity of milk (g) Artividical insecmination for conceiving (No/Nos)	1.0281 1-2	1.0266 2-9
Sheep and Gaot: : Cost of meat (Rs/kg)	148.47	170
Hydroponics: Fodder yield (kg/tray)	2.206	-
Hydroponics : Cost of fodder (Rs. /kg)	2.268	-

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																	
Fisheries (2017-18)	• Pond preparation & management; • Seed selection and stocking; • Feed and feeding management; • Health and water quality monitoring • Harvesting	*Catla catla, Labeo rohita, Amur Cyprinus carpio, Pangassius sp., Ctenopharyngodon idella*	10	01	787.5	375	551.7	150	267.8	60470.83	441333.3	380862	7.65	35000	120000	85000	3.42
Fishries (2018-19)	• Stokcing of bigger size fingerlings	*Catla and Common carp*	02	1	150000	150000	150000	45000	233.33	112500	187500	75000	1.66	40000	45000	5000	1.13
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**
Fisheries (2017-18): Average body weight (g)	867.4	710
Fisheries (2018-19: No./m^2	30	15
Servival rate (%)	50	20

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)	*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

* 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. Rice:

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	26	-
2	Farmers Training	02	45	
3	Field visit	05	74-	
4	Group Discussion	01	24	-
5	Others – Method Demonstration	02	29	

2. Rice (DSR)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	03	205	-
2	Farmers Training	07	180	
3	Field visit	14	404	
4	Group Discussion	02	223	-
5	Others – Method Demonstration	07	171	
	Media Coverate	10	-	In leading dailies and AIR, Chitradurga

3. Maize + Redgram

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	25	
2	Farmers Training	04	94	
3	Field visit	08	155	
4	Group Discussion	01	44	
5	Others – Method Demonstration	03	94	
	Media Coverage	02	-	In Vijayavani and Janathavani on Redgram as intercrop in Hybrid Maize

4. Redgram- NFSM

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	20	
2	Farmers Training	06	176	
3	Field visit	07	178	
4	Group Discussion	01	24	
5	Others – Method Demonstration	02	47	

5. Benglgram- NFSM

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	57	
2	Farmers Training	05	180	
3	Field visit	07	261	
4	Group Discussion	01	36	
5	Others – Method Demonstration	03	120	
	Media coverage	03	-	In Vijayakarnataka (21-11-2018), Janathavani (6-1-2019) &

				Vijayakarnataka (6-1-2019)

6. Finger Millet

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	23	
2	Farmers Training	03	86	
3	Field visit	06	102	
4	Group Discussion	01	19	
5	Others – Method Demonstration	02	43	
	Media Coverage	01	-	In Vijayakarnataka on use of water soluable fertlziers in fingermillet

7. Sorghum

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	72	
2	Farmers Training	01	17	
3	Field visit	03	24	
4	Group Discussion	01	19	
5	Others – Method Demonstration	01	07	

8.Tomato (2017-18)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	
2	Farmers Training	01	21	-
3	Field visits	03	21	
4	Group Discussion	01	14	
5	Others (Method Demosntration)	01	08	

9. Tomato (2018-19)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	30	
2	Farmers Training	02	32	
3	Field visits	06	78	
4	Group Discussion	01	32	
5	Others (Method Demosntration)	03	34	
	Media Coverage	01	-	In Vijayakarnata on 29-11-2018 on topic Tomato Demosnration

10. Onion

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	
2	Farmers Training	01	08	
3	Field visits	04	33	
4	Group Discussion	01	08	
5	Others (Method Demosntration)	01	07	
	Media Coverage	03	-	In Kannadaprabh on 6-7-2018, 8-8-2018 and 1-9-2018 on the topic ICM in Onion

11. French Bean

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	26	
2	Farmers Training	02	28	-
3	Field visits	04	31	
4	Group Discussion	01	55	
5	Others (Method Demosntration)	01	12	

12. Coconut

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	03	125	-
3	Field visits	06	84	
4	Group Discussion	01	43	
5	Others (Method Demonstration)	01	09	

13. Arecanut

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	03	125	-
3	Field visits	06	84	
4	Group Discussion	01	43	
5	Others (Method Demonstration)	01	09	
	Media Coverage	02	-	On the topics INM (Kannada Prabha, 29-4-2017) and Management of pest and Disease (Prajavani, 18-7-2018)

14. **Dairy (2017-18)**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	02	38	-
3	Field visits	03	31	
4	Group Discussion	-	-	
5	Others (Method Demonstration)	01	19	

15. **Dairy (2018-19)**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	01	15	
3	Field visits	02	26	
4	Group Discussion	-	-	
5	Others (Method Demonstration)	01	15	

16. **Hydroponic**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	01	06	
3	Field visits	01	06	
4	Group Discussion	01	10	
5	Others (Method Demonstration)	01	06	

17. **Sheep and Gaot**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	02	13	
3	Field visits	03	21	
4	Group Discussion	01	12	
5	Others (Method Demonstration)	01	06	

18. **Fisheries (2017-18)**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	02	20	
3	Field visits	03	40	
4	Group Discussion	01	10	
5	Others (Method Demonstration)	01	162	
	Media coverage	02	-	In Janathavani and Vijayakarnataka on 10-07-2018

19. **Fisheries**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	-	-	-
2	Farmers Training	01	02	
3	Field visits	10	20	
4	Group Discussion	01	02	
5	Others (Method Demonstration)	02	04	
	Media coverage	02	-	In Janathavani and Vijayakarnataka on 10-07-2018

20. **Blackgram (2017-18)**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	01	32	-
2	Farmers Training	2	34	-
3	Field visits	05	61	
4	Group Discussion	01	30	
5	Others (Method Demonstration)	2	38	
	Media Covrage	1	-	In Vijayavani on Blackgram FLD on 24-4-2018

PART VI – DEMONSTRATIONS ON CROP HYBRIDS (2018-19)

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																	
Paddy																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
Others (pl.specify)																	
Total																	
Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
Others (pl.specify)																	
Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Others (pl.specify)																	
Total																	
Cucumber																	
Tomato	ICM in Tomato	Arka samart	15	06	79.05	53.82	66.17	55.75	18.69	633324.9	132349	69024	2.1	69101.1	111500	42398.9	1.62
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	

Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total																	

H-High L-Low, A-Average

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

PART VII. TRAINING (2018-19)

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	1	3	-	3	9	2	11	12	2	14
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	6	73	96	169	6	3	9	79	102	181
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										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

Others (pl.specify) Kitchen Garden	1	8	58	66	-	8	8	66	66	132
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	1	2	22	24	-	5	5	2	27	29
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology	1	22	-	22	3	-	3	25	-	25
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										

Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
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										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	15	1	16	-	-	-	15	1	16
Animal Disease Management	1	14	1	15	-	-	-	14	1	15
Feed and Fodder technology	2	34	1	35	1	-	1	35	1	36
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)										
Plant Protection										
Integrated Pest Management	1	16	-	16	7	-	7	23	-	23
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										

Fisheries										
Integrated fish farming	1	6	2	48	15	-	15	61	2	63
Carp breeding and hatchery management										
Carp fry and fingerling rearing	1	31	-	31	7	-	7	38	-	38
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										

Apiculture										
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)Marketing	2	85	9	94	19	-	19	104	9	113
Agro-forestry										
Production technologies	1	147	-	147	15	2	17	162	2	164
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**20**	**500**	**190**	**690**	**82**	**20**	**102**	**582**	**210**	**792**

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	4	64	-	64	2	-	2	66	-	66
Resource Conservation Technologies										
Cropping Systems	1	26	-	26	3	-	3	69	-	69
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										

Integrated Crop Management	3	73	3	76	4	1	5	77	4	81
Soil and Water Conservation	1	4	17	21	6	3	9	10	21	31
Integrated Nutrient Management	6	96	-	96	43	1	44	139	1	140
Production of organic inputs										
Others - Seed treatement	3	60	5	65	6	-	6	66	5	71
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	6	-	6	-	-	-	6	-	6
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
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 - Coconut Climbing	1	19	-	19	2	-	2	21	-	21
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology	3	93	1	94	7	-	7	100	1	101
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										
Integrated water management										
Integrated nutrient management	4	43	-	43	-	-	-	43	-	43
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	1	7	-	7	-	-	-	7	-	7
Nutrient use efficiency										

Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	2	21	5	26	-	-	-	21	5	26
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	5	-	15	-	-	-	15	-	15
Animal Disease Management	2	43	12	55	1	-	1	44	12	56
Feed and Fodder technology										
Production of quality animal products										
Others - Sheep management	1	5	-	5	-	-	-	5	-	5
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)										
Plant Protection										
Integrated Pest Management	4	101	-	101	18	-	18	119	-	119
Integrated Disease Management	1	28	-	28	7	-	7	35	-	35
Bio-control of pests and diseases	2	40	-	40	2	-	2	42	-	42
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									
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									
Entrepreneurial development of farmers/youths									
Others (pl.specify)									
Agro-forestry									
Production technologies									
Nursery management									
Integrated Farming Systems									
Others (Pl. specify)									

TOTAL	**41**	**744**	**43**	**787**	**101**	**4**	**104**	**845**	**47**	**892**

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										

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 farm science courses	3	150	180	330	25	23	48	175	203	378
TOTAL	**3**	**150**	**180**	**330**	**25**	**23**	**48**	**175**	**203**	**378**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										

Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL										

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										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs	1	28	-	28	2	-	2	30	-	30
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 – Productivity enhancement in Horticulture crops	2	104	15	119	51	15	66	155	30	185
Total	3	132	15	137	53	15	68	185	30	215

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
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	7	10	27	1	2	3	18	12	30
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**	25	494	49	543	327	69	396	821	118	939
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management	1	23	-	23	19	-	19	42	-	42
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	CapacityBuilding and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	**27**	**534**	**59**	**593**	**347**	**71**	**418**	**881**	**130**	**1011**

Details of sponsoring agencies involved

1. ATMA
2. NFDB

3. Sujala-III

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
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										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total										

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

S. No.	Name of Job Role	Date of Start	Date of Assessment	Total Expenditure (Rs.)	No. of Participants									No of Participants passed assessment
					General			SC/ST			Grand Total			
					Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	Coconut Climbing	**16-1-2019**	**15-2-2019**	**1,65,200**	**18**	**-**	**18**	**3**	**-**	**3**	**18**	**3**	**21**	**21**
2.	Dairy Managemetn	**21-1-2019**	**25-3-2019**	**1,89,600**	**14**	**3**	**17**	**3**	**-**	**3**	**17**	**3**	**20**	**20**

PART VIII – EXTENSION ACTIVITIES (2018-19)

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
Advisory Over Phone	574	462	29	491	74	9	83	0	0	0
Animal Health Campaign	0	0	0	0	0	0	0	0	0	0
Bimonthly Meeting	7	0	0	0	0	0	0	327	73	400
Celebration of Important Days	13	1264	630	1894	677	406	1083	114	45	159
Diagnostic Visit	75	203	10	213	54	2	56	108	26	134
Exhibition	0	0	0	0	0	0	0	0	0	0
Exposure Visit	6	132	14	146	36	2	38	4	0	4
Ex-Trainees Samelan	0	0	0	0	0	0	0	0	0	0
Farmers Science Conveners Meet	0	0	0	0	0	0	0	0	0	0
Farmer/Extn. Pernl. visit to KVK	1590	936	276	1212	234	98	332	34	12	46
Farmers Seminar/Workshop	0	0	0	0	0	0	0	0	0	0
Field Day	13	345	47	392	43	5	48	53	7	60
Farmers Seminar/Workshop	3	0	0	0	0	0	0	107	13	120
Formation of SHGs	0	0	0	0	0	0	0	0	0	0
Group Meeting	0	0	0	0	0	0	0	0	0	0
Kisan Mela	4	10502	3637	14139	6161	3180	9341	390	141	531
Kisan Ghosti	9	1078	403	1481	320	209	529	90	35	125
Lect. Delivered as Resource Person	187	5804	2672	8476	2389	1155	3544	4672	758	5430
Method Demonstration	67	899	155	1054	172	19	191	264	25	289
Scientist visit to farmers field	340	1562	281	1843	622	105	727	570	129	699
SHG Conveners Meet	0	0	0	0	0	0	0	0	0	0
SHC Campaign	5	91	1	92	18	0	18	20	0	20
News Paper Coverage	58	-	-	-	-	-	-	-	-	-
Popular Article	7	-	-	-	-	-	-	-	-	-
Radio Talk	8									
TV Talk	19									

Total	**2973**	**23278**	**8155**	**31433**	**10800**	**5190**	**15990**	**6753**	**1264**	**8017**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIAL (2018-19)

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Name of the Variety	Name of the Hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
Oilseeds	Castor	Ranebennur local	-	4	17,600	12
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds	Stylo	*Styloxanthus hemata*	-	0.25	1,750	1
Fiber crops						
Forest Species						
Others – Green manure	Velvet Beans	*Mucuna spp*	-	0.61	6,125	6
	Diancha	-	-	3.58	14,749	1
Total				**8.44**	**40,224**	**20**

9.B. Production of planting material by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings	Drumstick	KDM-1 (Bhagya)	-	3808	38080	20
Fruits	Mango (Cuttings)		Alphanso	150	300	1
Ornamental plants						
Medicinal and Aromatic						
Plantation	Arecanut	Channagiri local	-	6430	160750	33
	Cashew	-	Vengrula -4	1510	85500	11
	Coconut	Arasikere tall	-	2047	138925	60
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						

Total				**13945**	**423555**	**124**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (q)	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Azolla	0.31	620	21
	Rhizophos	0.17	1700	1
	Compost Prachodak	6.76	33240	600
Bio-pesticide	Metarizium	1.8 l	7200	4
	Pseudomonas	7.7 l	26950	60
Bio-fungicide	*Trichoderma Harzianum*	17.2 l	51600	24
	Trichoderma Harzianum	0.02	240	1
Bio Agents	Earthworms	0.47	14355	29
Others- Micro nutrient mixture	Banana Special	20.82	381100	443
	Vermicompost	203.26	200760	280
Total		**258.54**	**717765**	**866**

9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others	-			
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				

Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others –Ornamental fishes	Guppies, Mollies, Sword trails	6270	6270	3
Total		6270	6270	3

PART X – PUBLICATIONS, SUCCESS STORY, INNOVATIVE METHODOLOGY, ITK, TECHNOLOGY WEEK

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

(A) KVK Newsletter:
Date of start: Oct. 2007 Periodicity: Quarterly Copies printed in each issue: 500

(B) Literature developed/published

Item	Number
Research papers- International	1
Research papers- National	-
Technical reports	1
Technical bulletins	-
Popular articles - English	-
Popular articles – Local language	7
Extension literature	-
Others (Pl. specify)	-
TOTAL	9

10.B. Details of Electronic Media Produced

S. No.	Type of media	Title	Details
	CD / DVD	ICAR-Taralabalu KVK Activities	-
	Mobile Apps	-	-
	Social media groups with KVK as Admin	3 WhatApp Group	1. ICAR-Taralabalu KVK 2. Davanagere FPO Group 3. Horticulture Solutions
	Facebook account name	taralabalukvk@gmail.com	KVK activities are shared with farmers and general public
	Instagram account name	-	-

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

10 F. Technology Week celebration during 2018-19:

Period of observing Technology Week: From 04-12-2018 to 6-12-2018

Total number of farmers visited : 1089

Total number of agencies involved : 6 (Agriculture Department, Horticulture Department, Sujala-III, ATMA Project, RCF Ltd and District Krishika Samaja)

Number of demonstrations visited by the farmers within KVK campus : 13

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies		1089	
Lectures organized	6		Women entrepreneurship Kitchen Garden, Bio-degradation of city waste, NICRA technologies, Soil and Water conservation, Integrated Dairy Farming.
Exhibition	2		Krishi Vigyan Kendra technologies and bio-degradation of city waste.
Film show			
Fair			
Farm Visit	3		Krishi Vigyan Kendra instructional farm
Diagnostic Practicals			
Supply of Literature (No.)	3		Kitchen garden, Soil health cards
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	3		-

PART XI – SOIL AND WATER TEST

11.1 Soil and Water Testing Laboratory

A. 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	Status
1	Digital conductivity meter	01	12,860-00	Good
2	Digital pH meter	01	11,033-00	**Good**
3	Flame photometer	01	48,375-00	**Good**
4.	Spectrophotometer	01	42,570-00	**Good**
5.	Macro Block digestion system: KIL 08 L	01	96,212-00	**Good**
6.	Distillation system KJELO DIST EAS VA	01	1,77,268-00	**Good**
7.	Digital Burette Titration system	01	53,212-00	**Good**
8.	Quartz single distillation model with 4 l/h capacity	01	31,482-00	**Good**
9.	Quartz double distillation unit with 1.5 l/h capacity	01	64,130-00	**Good**
10.	Hot air oven	01	29,786-00	**Good**
11.	Hot plate Rectangular	01	6,784-00	**Good**
12.	Water bath	01	5,724-00	**Good**
13.	Digital Analytical balance capacity 210 g	01	69,960-00	**Good**
14.	Table top balance capacity 10 kg	01	6,890-00	**Good**
15.	Heating mantle capacity 250 ml	01	1,908-00	**Good**
16.	Kent water purifier	01	16,500-00	**Good**
	Total	**15**	**6,74,694-00**	

B. Details of samples analyzed since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	8173	6486	4344
Water Samples	6279	4718	4004
Plant samples	-	-	-
Manure samples	-	-	-
Others (specify)	-	-	-
Total	14452	11204	8348

C. Details of samples analyzed during the 2018-19:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages *
Soil Samples	1133	951	831
Water Samples	988	850	772
Plant samples			
Manure samples			
Others (specify)			
Total	**2121**	**1801**	**1603**

***** Villages may be repeated

11.2 Mobile Soil Testing Kit: No soil test kit

A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1.		
2.		

B. Details of soil samples analyzed during 2018-19 and since establishment with Mobile Soil Testing Kit:

	Progress during 2018-19	Cumulative progress
Samples analyzed (No.)		
Farmers benefited (No.)		
Villages covered (No.)		

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit during 2018-19:

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	1-4-2018 To 31-3-2019	-	951	1133	1133
Mobile Soil Testing Kit	-	-	-	-	-

11.4 World Soil Health Day celebration

Sl. No.	Farmers participated (No.)	Soil health cards issued (No.)	VIPs (MP/ Minister/MLA attended (No.)	Other Public Representatives participated	Officials participate (No.)	Media coverage (No.)
1	450	180	1	3	15	9 (In leading news papers)

PART XII. IMPACT

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

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.

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

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:

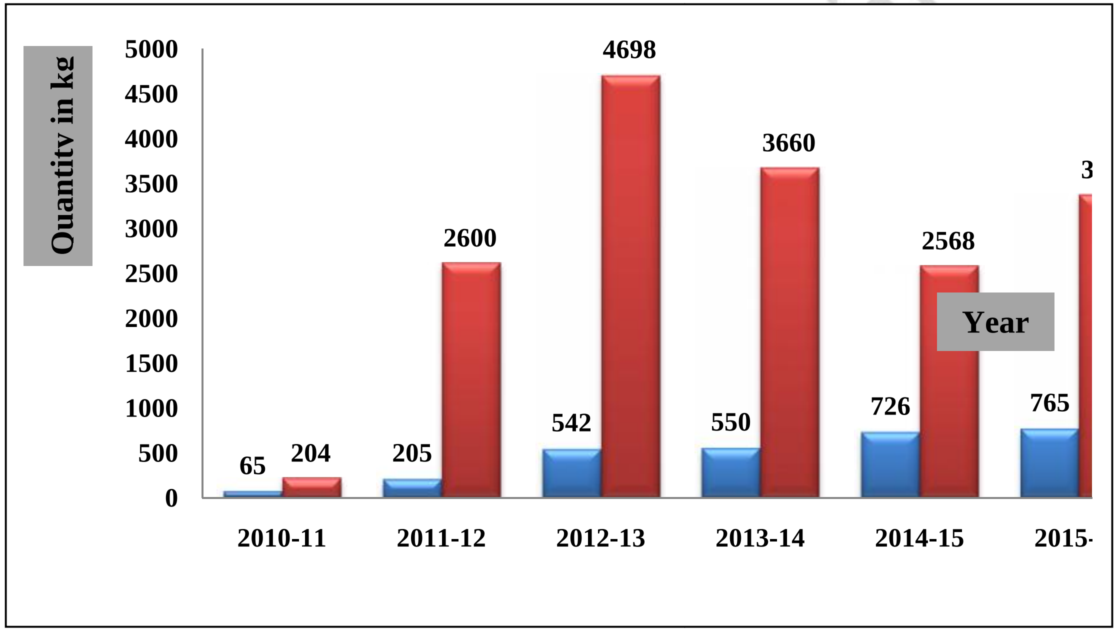
ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere, had undertaken frontline demonstrations on foliar application of Banana special and the spray schedule was 6 sprays at 5^{th}, 6^{th}, 7^{th}, and 8^{th}, month after planting. The fifth spray on emergence of bunch and sixth spray one month after bunch 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.

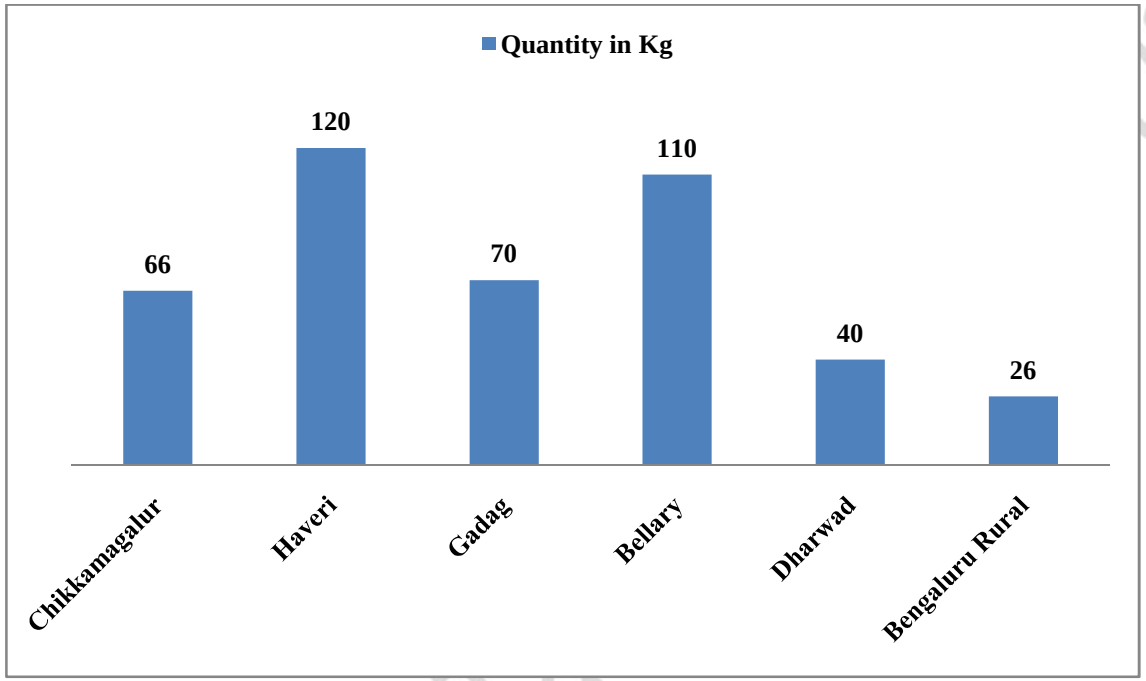
Fig 1: Year wise Supply of Banana special by KVK



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.

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4. Outscaling of Agricultural Technologies – Experiences of Krishi Vigyan Kendras-IIHR special, 2013, Krishi Vigyan Kendra-MYRADA, Erode.14-15.

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

PART XIII - LINKAGES

13A. Functional linkage with different organizations

Name of organization	Nature of linkage
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.
MANAGE, Hyderabad	Trainings, DAESI
IAT and Krishika Samaja	Collaborative Programmes like trainings, Workshops
College of Horticulture, Hiriyur	Organize 5 day Rural Agriculture and Horticulture work experience programme for final year B.Sc (Horticulture) students.
Tota Uthpanna Marata Co-Operative Society, Channagiri	Training related to horticultural technologies
ATMA	Field visits, Trainings, Krishi Abiyana
Spoorthy (NGO), Davanagere	Biofuel activities
Karnataka State Biofuel Development Board	Sponsored project in ongoing since 2011
CRIDA, Hyderabad	Climate resilient technologies for NICRA project.

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

13B. List of 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	710000
Bio-engery Information and Demonstration Centre	22-3-2011	Karnataka State Bio-engery Development Board, GoK	400000
Sujala-III,	Feb, 2019	Department of Agriculture	599900

13C. Details of linkage with ATMA

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	Farmers Awards Selection Meeting	02	-	-
		Taluk level programme implementation meeting	01	-	-
02	**Research projects**				
03	**Training programmes**				
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela	Organic and millet mela	01		
	Technology Week	Technology week		01	
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	SSREP				
	Others (Pl. specify)	Rabi mela	**01**	**01**	
06	**Publications**				
	Video Films				
	Books				
	Extension Literature				

	Pamphlets				
	Others (Pl. specify)				
07	**Other Activities** (Pl.specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
1	Trainings	Participated as Resource person	-	--	-

13E. Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Training	3 day sponsored training	-	-	

13F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Trainings	Organised 2 skill development trainings	354800	351465	Two skill development trainings were organized

13G. Kisan Mobile Advisory Services

Month	Message type (Text/Voice)	SMS/voice calls sent (No.)						Total SMS/Voice calls sent (No.)	Farmers benefitted (No.)
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
April 2018									11508
May									
June	Text Message	1	0	0	0	4	0	5	
July	Text Message	0	0	0	0	1	0	1	
August	Text Message	0	0	0	0	1	0	1	
September	Text Message	0	0	0	0	1	0	1	
October			0	0	0		0		
November			0	0	0		0		
December	Text Message	0	0	0	0	3	0	3	
January 2019		0	0	0	0		0		
February	Text Message	0	0	0	0	2	0	2	
March		0	0	0	0		0		
Total		1	0	0	0	12	0	13	11508

PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Azolla	2013	-	*Azolla pinneta*	Seeds	31 kgs	520	13,640	
2	Vermicompost	2010	-	*Udrilus spp*	Vermicompost and Earthworms	20326 kg 47.85 kg	69,400	2,29,945	
3	Banana Special	2010	-	-	Micro nutrient mixture	2082 kgs	138330	557850	
4	Mango orchard	2009	1.2 ha	*Alphanso*	Fruits	-	1,400	1,92,793	
5	Horticulture Nursery	2013	0.1	-	Seedling of fruits and vegetables	-	3,29,685	414560	

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Caster	13-6-2018	12-12-2018	1 ha	*DCH-117*	Seeds	3 q	18,700-00	17,617-00	Yield was low
Fibers									
Spices & Plantation crops									
Arecanut	15-6-2018	12-02-2019	1 ha	Local	Nuts	39 q	135,125-00	1,17,287-00	
Coconut	20-06-2019	10-12-2018	0.5 ha	Arasikere local	Nut	1881	720	28222-00	
Floriculture									
Fruits									

Mango orchard	01-06-2005	31-03-2019	1 ha	Local	Mango Fruits	3855 kgs	1400	192793-00	
Tamarind	20-05-2005	31-03-2019	1 ha	Local	Fruits	238 kg	19,018-00	11,900-00	
Vegetables									
Seed Production:									
Diancha	03-01-2019	20-03-2019	2 ha	Local	Seed				Crop attacked by Army worm
Marigold	25-04-2018	24-07-2018	0.5 ja	Commercial	Flower	30 q	39810	76460-00	
Marigold	04-07-2018	16-10-2018	0.5 ha	Commercial	Flower	28 q	31990	28290	
Drumstick pods	01-04-2018	31-03-2018		Commercial	Production	117 kg	5600	11170	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	*Trichoderma harizianum*	172 L	51848	98,680	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Dairy	*HF X & Malenadu Gidda*	Milk	8583 L	3,12,936	3,82,395	
2	Fishries	*Cattla, Rohu, Mrugal*	Ediable fish and ornamental fish	-	7,194	28,470	

14E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2018	7	2	
May	0	0	
June	65	5	
July	0	0	
August	53	9	
September	13	5	
October	152	4	
November	0	0	
December	140	4	
January 2019	128	17	
February	33	5	
March	57	6	
Total	**648**	**57**	

14F. 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

14G. 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 H. Farmers Field School :

CROP	**Groundnut (G2 52)**
Technology	Integrated Pest Management in Groundnut
Area	1 acre
Collaborator	Mrs Savithramma
Participants	25
Facilitator	SMS (Agronomy, Soil Science, SS &H)
Village	Musturu, Jagaluru tq.

Sl. No.	**DATE**	**Activities**
1	17-7-2018	Seed treatement with biofertilzers and sowing
2	6-8-2018	Integrated weed and nutrient management
3	31-8-2018	Importance of pest and disease management
4	26-9-2018	Post harvest management and yield losses

Name of the technology demonstrated	**Variety**	**Farming situation**	**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**
Integrated Pest Managemenin Groundnut	G2 52	Rainfed	17.8	8.3	17.09	28750	43912	15162	1.52	28000	40587	12587	1.44

PART XV - FINANCIAL PERFORMANCE

15A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute							
With KVK	State Bank of India	Davanagere	05624	Taralabalu Krishi Vigyan Kendra	30166599498	577002902	SBIN0005624

15B. Utilization of KVK funds during the year 2018-2019(Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	128.00	127.89	125.79
2	**Traveling allowances**	0.75	0.49	0.39
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.31	2.31	2.31
B	POL, repair of vehicles, tractor and equipments	1.80	1.80	1.80
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.00	1.00	1.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.25	0.25	0.25
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	3.20	3.11	3.10
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.40	0.30	0.30
G	Training of extension functionaries	0.14	0.14	0.14
	Extension Activities	0.50	0.50	0.50
	Farmers Field School – FFS	0.30	0.28	0.28
	SWT & Soil Health Cards	0.30	0.24	0.24
H	Maintenance of buildings	0.50	0.50	0.50
J	Library	0.05	0.05	0.05
TOTAL (A)		**139.50**	**138.86**	**136.65**

B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)		0.00		0.00
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**139.50**	**138.86**	**136.65**

15C. Status of revolving fund (Rs. in lakh) for the last three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2016 to March 2017	7.905	42.129	41.585	8.449
April 2017 to March 2018	8.449	36.047	41.837	2.659
April 2018 to March 2019	2.659	67.724	54.639	15.744

16. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Mr Basavanagowda M.G.	SMS (Horticulutre)	Production technology of dragon fruit	CHES, Hirihalli	30-6-2018
Mr. Mallikarjuna B.O.	SMS (Agronomy	Production technology of bio pesticide	ICAR KVK, Bagalkote	28-6-2018 to 30-6-2019
Mr. Sannagoudra H.M.	SMS (Soil Science)	Production technology of bio pesticide	ICAR KVK, Bagalkote	28-6-2018 to 30-6-2019
Mr Raghuraja J.	SMS (Agri. Extension)	Masters training on revisiting SREP	UAS, Dharwad	27-8-2018 to 28-8-2018

17. Please include any other important and relevant information which has not been reflected above:

1. Soil Health Campaigns:

In collaboration Rastriya Chemicals and Fertilizers Ltd, Davanagere. 5 Soil Health Campaigns were organized in in the following villages.

Marikunte village, Jagalur taluk (26-5-2018)

Pallagatte village, Jagaluru taluk (26-5-2018).

Ucchavanahalli village, Davanagere taluk (29-5-2018)

Nitigere and Devarahalli villages, Channagiri taluk (30-5-2018)

Hebbalu village, Davanagere taluk (31-05-2018)

2. Mr. Mallikarjuna B.O., SMS (Agronomy) and Mr. H.M. Sannagoudra, SMS (Soil Science) visited ICAR-Krishi Vigyan, Bagalkote from 28 to 30 June , 2018 to study 'Production Technology of Bio pesticides'.
3. Honorable Prime Minister Sri Narendra Modi's live interaction with farmers was organized in Krishi Vigyan on 20-6-2018.
4. Rain Water Harvesting Structure was adopted in Administrative building and collected water is used for borewell recharge unit.
5. 363 PUC passed students were trained in preparation for Practical exams to get admission to Agricultural Universities (3 trainings).

6. Bimonthly Meeting for FPO's:

Bi-Monthly meeting for active FPO's in the district was organized co-ordination among FPO's input and out business, business plans were discussed in the meetings (21-5-2018, 20-6-2018, 17-9-2018, 15-11-2018, 22-1-2019 and 18-3-2019)

7. Dr. Devaraja T.N., Senior Scientist and Head, participated in Annual Progress Review Meeting held at ICAR-Krishi Vigyan Kendra, Iduki, Kerala during 16-19 May 2018 and presented Krishi Vigyan Kendra progress Report 2017-18.
8. Scientists from ICAR-KLE Krishi Vigyan Kendra, Belagum visited our Krishi Vigyan on 26-7-2018 to study Krishi Vigyan Kendra technologies and PFMS operations.
9. Honorable Prime Minister Sri Narendra Modi's live interaction with women SHG members was organization 17-7-2018.

10. Dr. Devaraja T.N., Senior Scientist Cum Head, Mr. Mallikarjuna B.O., SMS (Agronomy), Mr. Sannagoudra, SMS (Soil Science) visited ICAR-JSS Krishi Vigyan Kendra, Mysore on 20-7-2018 to study the Krsihi Vigyan Kendra technologies and input supply outlet.
11. Tri-Monthly meeting for Horticulture Extension Officers from Davanagere and Chitradurga districts was organized on 17-7-2019 and Horticulture Day was celebrated. Mr. Basavanagowda M.G., SMS (Horticutlure) gave lecture on nursery management in horticulture crops.

12. RAHWE Programme:

Rural Agricultural and Horticulture work experience programme for Final year B.Sc (Horticulture) students from college of Horticulture, Hiriyur was organized from 20-8-2018 to 25-8-2018.

13. Paid training on 'Sandal Wood and Other Forestry Technology was organized on 17-8-2018. Dr. Ramakrishna Heggade, Professor, College of Forestry, Ponnampet participated as resource person.
14. **Krishi Melas:** In collaboration with Development Departments and Input Dealers, the Krishi Mela was organized at Sirigere Chitradurga district from 20-9-2018 to 24-9-2018. Participated in the Krishi Mela organized by UAHS, Shimogga from 12-10-2018 to 15-10-2018
15. **Sponsored Training:**

ICAR-CIFA, Reginal Research Centre, Bengaluru Sponsored training on 'Fisheries Value Addition and Ornamental Fisheries was organized during 26-28 September 2018.

16. Live Television Programme:

Mr. Basavanagowda M.G., SMS (Horticulture) participated in live DD-Chandana Programme on 'Integrated Organic Farming' on 27-9-2018 along with innovative farmer on M.G. Karibasappa from Malebennur, Harihara taluk.

17. Swachha Bharat Abhiyan' under the theme 'Swacchateye Seve' (Cleaning is service) was celebrated from 15-9-2018 to 2-10-2018 by organizing awareness programme, Degradation of agricultural waste, city waste management, cleaning of common sharing place, Krishi Vigyan Kendra campus cleaning and concluded with celebration of Gandhiji and Shastriji's birth day.
18. **Farmers Study Tour:**

Inter State Farmers Study Tours for 5 days for FPO members were organized for Devarahalli, Ucchavannahalli and Marikunte FPO's.

19. Vigilance Awareness Week was celebrated from 29-10-2018 to 3-11-2018 under the them: Eradicate Corruption and Build New India. The week was celebrated through creating awareness among the farmers, Extension Officers, School and College Students through various programme.
20. Flower Show: Participated in the 10 days 'Flower Show' organized by Department of Horticulture, Davanagere from 26-1-2019 to 4-2-2019.
21. **Organic and Millet Mela:**

    Participated in the 2 days 'Organic and Millet Mela' organized by Department of Agriculture, Davanagere from 12-1-2019 to 13-1-2019:
22. **Skill Development Training:**

    Two Skill Development Trainings Sponsored by Agriculture Skill Council of India, New Delhi were organized on 'Coconut Tree Climbing and Plant Protection Management' (21 days, 21 youth, 16-1-2019 to 5-2-2019) and 'Dairy Enterprise Training' (30 days, 20 youth, 21-1-2019 to 19-2-2019)

23 **Rabi Mela:**

Rabi Mela was organized at Narasapura village, Davanagere tq. in collaboration with Department of Agriculture, ATMA project, Davanagere on 12-2-2019.

24. Live Telecast of 'Pradhan Mantri Kisan Samman Nidhi' programme inauguration by Honorable Prime Minister Sri Narendra Modi was organized on 24-2-2019. Sri G.M. Siddeshwara, Member of Parliament and Sri S.A. Ravindranath, MLA participated on the occasion.

Special Days Celebration:

- In collaboration with district administration 'World Environment Day' was celebrated on 5-6-2018 at Davanagere on 12-6-2018 at Daginakatte, Channagiri taluk, on 15-6-2018 at Kyasinakere, Honnali taluk and on 10-6-2018 at Saptagiri School, Davanagere.
- ' International Yoga Day' was celebrated on 21-6-2018.
- 'National Fish Farmers Day' was celebrated in Harihar on 10-7-2018 in collaboration Fisheries Department, Davanagere.
- 'World Biofuel Day' was organized at Tumbigere village, Davanagere taluk on 10-8-2018 in collaboration with Karnataka State Biofuel Development Board, Bengaluru and District Administration, Davanagere.
- 'Parthenium Eradication Awarness Week' was celebrated from 16-8-2018 to 22-8-2018.
- 72nd Independence Day was celebrated on 15-8-2018.
- Dr. M.H. Marigowda's birth day was elecbrated on 8-8-2018 in collaboration with Horticulture Department, Davanagere.

- Kisan Mahila Diwas and 'World Food Day' was celebrated on 16-10-2018 and the programmes was inaugurated by Dr. Sharanappa Halase, Vice Chancellor, Davanagere University, Davanagere. Progressive Farm Women Smt. Soroja Patil and Smt. Mamatha Shivaraj were felicitated on the occasion.
- 'Kisan Saman Diwas' was celebrated in collaboration with Department of Agriculture, IAT and Krishika Samaj, Davanagere.
- 'Women in Agriculture Day' was celebrated on 4-12-2018.
- 'World Soil Health Day' was celebrated on 5-12-2018
- National Productive Week: National Productivity Week was celebrated in collaboration with 'National Productivity Council of India; New Delhi on the theme ' Sustainable Productivity and circular economy' from 12-2-2019 to 18-2-2019 by organizing awareness programme.
- 'World Water Day' was celebrated at Naraganahalli, Davanagere tq. in collaboration with farmers organizations on 22-3-2019.
- 'National Science Day' was celebrated at DATC, Kadajji on 28-2-2019.
- 'International Women Day' was celebrated on 8-2-2019.

Taralabalu District Bioenergy Research Information and Demonstrating Centre

District Bioenergy Research, Information and Demonstration Centre started during the Financial year 2011-12. The project is funded by Karnataka State Biofuel Development Boar, Ministry of Rural Development and Panchayath Raj, Government of Karnataka.

The main objective of the project:

1. Bring awareness about usage of biodiesel as alternative resource to traditional fossil fuel i.e. Diesel .
2. Projection of biodiesel by utilizing locally available resource.
3. Importing biodiesel production skill for entrepreneurs.
4. Conduct awareness and training programme for rural and urban population.

Around 95 training prorammes 110 awareness programmes and 50 exhibitions have been conducted till date. Around 300 L of Biodiesel produce from Honge seed, Simarouba seed, Turmeric leaf and waste cooking oil.

Biodiesel Produce by the centre is utilized for office diesel vehicles , generator and farm machineries. Apart from this it is also utilized for cars and 4 wheelers.

NICRA

1. Desilting and deepening of 2 check dams. One in Siddanur and another one in Agasanakatte.
2. Cultivation of Redgram (BRG-5) as intercrop in Maize was taken up with 30 farmers.
3. Cultivation of drought tolerant Finger millet (ML-365) was taken up with 30 farmers.
4. Cultivation and use of drought tolerant HYV of fodder Sorghum (CoFS-29) in Dairy animals was taken up with 100 farmers.
5. Supplementation of vitamins and minerals mixture for Dairy animals was taken up with 100 farmers.
6. Enrichment and use of low quality feeding stuffs was taken up with 50 farmers.
7. Encouraged one faremr to rear indigenous cattle breed and do organic agriculture.
8. Total deworming and vaccination of livestock (1395 animals) done.