

# **Annual Progress Report 2016-17**

**(FOR THE PERIOD FROM APRIL 2016 TO MARCH 2017)**

**Submitted to:**

**Director**

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

**Submitted by:**

**ICAR-TaralabaluKrishiVigyan Kendra, Davanagere**

**Kadalivana, LIC Colony Layout, B.I.E.T. Road**

**Davanagere - 577 004**

**Phone: 08192-263462,**

**Email: [kvk.Davanagere@icar.gov.in](mailto:kvk.Davanagere@icar.gov.in)**

**Website: [www.taralabalukvk.com](http://www.taralabalukvk.com)**

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR- Krishi Vigyan Kendra Kadalivana, LIC Colony Layout, B.I.E.T. Road, Davanagere – 577 004 Davanagere-Dist.	08192 – 263462	08192 – 260969	<a href="mailto:dvgtkvik@yahoo.com">dvgtkvik@yahoo.com</a>	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	<a href="mailto:dvgtkvik@yahoo.com">dvgtkvik@yahoo.com</a>	<a href="http://www.taralabalu.org">http://www.taralabalu.org</a>

**1.3. Name of the Senior Scientist-Cum-Head 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 31<sup>st</sup> March 2017)**

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

Name of the incumbent	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/Others)
3	8	9	10	11	12
Dr. Devaraja T.N.	37400-67000	48170/-	17-05-2005	Permanent	Others
Mr. Basavanagowda M.G.	15600-39100	23700/-	21-11-2006	Permanent	Others
Mr. Mallikarjuna B.O.	15600-39100	22020/-	09-01-2008	Permanent	Others
Dr. Jayadevappa G.K.	15600-39100	22020/-	29-01-2008	Permanent	Others
Mr. Raghuraja J.	15600-39100	21220/-	23-06-2008	Permanent	Others
Mr. Prasanna Kumara N.	15600-39100	20440/-	24-06-2008	Permanent	Others
Mr. Sannagoudra H.M.	15600-39100	17550/-	01-07-2013	Permanent	Others
Mr. Revanasiddappa G.B.P.	9300-34800	11010/-	11-04-2012	Permanent	Others
Mr. Santhosh B.	9300-34800	12930/-	05-09-2008	Permanent	Others
Mr. Vijayakumar S.B.	9300-34800	12430/-	23-06-2008	Permanent	Others
Mr. Mallikarjuna S.Gudihindala	9300-34800	16920/-	01-06-2005	Permanent	Others
Mrs. Mamatha H. Melmalagi	5200-20200	11100/-	27-06-2005	Permanent	Others
Mr. Shivakumara B.	5200-20200	8240/-	01-06-2005	Permanent	Others
Mr. Shivakumara S.E.	5200-20200	8240/-	01-06-2005	Permanent	Others
Mr. Marulasiddaiah N.M.	5200-20200	8670/--	01-06-2005	Permanent	Others
Mr. Shivakumara S.	5200-20200	9360/-	01-06-2005	Permanent	Others

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

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

**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
<b>1.</b>	<b>Administrative Building</b>	ICAR	04.01.2008	550	29.37			Completed
<b>2.</b>	<b>Farmers Hostel</b>	ICAR	04.01.2008	300	18,82,000.00			Completed
<b>3</b>	<b>Plant Health Clinic</b>	ICAR	01.04.2012		10,00,000.00			Completed
<b>4.</b>	<b>Staff Quarters</b>	ICAR	04.01.2008	400	19,40,000.00			Completed
	1. SMS (Animal Science)							
	2 . SMS (Agri. Extension)							
	3. Farm Manager							
	4. Stenographer							
	5. Office Assistant							
	6. Driver (Jeep)							
<b>5.</b>	<b>Demonstration Units</b>							
	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.Portable Carp hatchery	ICAR	31-03-2011	--	2,25,000-00			Completed
	8.Fodder demo units	RF	2010	4000	41,428.00			Completed
	9. Biogas unit	RF	2011	04	29920.00			Completed
	10. Fish cum paddy cultivation unit	RF	2011	421	13071.00			Completed
	11. Vermicomposting units	RF	2008	121	60000			Completed
	12 .Vermicomposting unit	DBT	2010	60	15000			Completed

<b>6.</b>	<b>Orchards and agro forestry</b>						Completed
	1. Mango	RF	2000	12000	53215.00		Completed
	2. Sapota orchard	RF	2010	4000	44775.00		Completed
	3. Hexagonal and penta planting of coconut garden, Germ plasm coconut	RF	2009	4000	9035.00		Completed
	4. Arecanut garden	RF	2007	8000	72228.00		Completed
	5. Tamarind garden, Medicinal plants	RF	2000	2000	--		Completed
	6. Curry leaf garden	RF	2007	500	--		Completed
	7. Agro forestry with biofuel plants	RF	2000	24000	13166.00		Completed
<b>7.</b>	<b>Fencing</b>	ICAR	31-03-2011	930 feet	11,00,000		Completed
<b>8.</b>	<b>Rain Water harvesting system</b>	--	--	--	--	To be sanctioned	--
<b>9.</b>	<b>Threshing yard</b>	ICAR	31-03-2011		2,00,000-00		Completed
<b>10.</b>	<b>Farm Godown</b>	ICAR	--	--	--	To be sanctioned	--
<b>11.</b>	<b>Bore wells (2 No.s)</b>	ICAR	31-03-2011		3,00,000-00		Completed
<b>12.</b>	<b>Irrigation system</b>	ICAR	31-03-2011		1,00,000-00		Completed
<b>13.</b>	<b>Borewell recharge unit</b>	RF	01-06-2011		64,585-00		Completed

### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run (upto 31-03-2016)	Present status
Tractor and Trailer	2005	4,99,995-00	3196 hours	Good
Power tiller Funded by FLD cotton	2008	99400-00	--	Good
Power Tiller	2010	131500-00	--	Good
Tempo Cruiser	2005	4,99,250-00	240404	Good
Hero Honda CD Deluxe	2006	39,298-00	66252	Good
Yamaha Alba	2009	48,309-00	50478	Good

## C) Equipments &amp; 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 SAC meeting conducted in 2016-17

Sl. No	Date	Major recommendations	Status of action taken in brief	Tentative date of SAC meeting proposed during 2017
1	2	3	4	5
3.1	28-12-2016	<b>Group-I : To be addressed at KVK level</b>	<b>On going</b>	<b>22-12-2017</b>
		Promote apiculture as subsidiary Agriculture activity.		
		Develop suitable marketing avenues for baby corn.		
		Develop fertigation schedule for major horticulture crops.		
		Cost of cultivation for major Horticulture and Agriculture crops to be prepared for finalization of term sheet.		
		Promote marketing linkage for minor millets.		

	Establish demonstration fish pond of 1000 sq feet at KVK.		
	Attract rural youth towards agriculture through ARYA programme.		
	Create awareness about afforestation		
	Give suitable technology for late sown Kharif crops.		
	Establish processing unit for millets at KVK		
	More seed production of cereals and pulses in the KVK demonstration plots.		
	Give more importance for seed production of Rashmi Blackgram and KKP-3 Green gram. To encourage poor quality feeding stuffs enrichment.		
	<b>Group-II : To be addressed through action plan of KVK for the year 2017-18</b>		
	Popularize foliar application of micronutrients in agriculture crops.		
	Propose varieties for Abiotic stress tolerance		
	Propose demonstrations of inter discipline subjects.		
	Promote pepper as intercrop in Arecanut garden.		
	Propose pulses as intercrops in Maize in future demonstration.		
	Take up more demonstration on pulses and legumes.		
	3		
	<b>Group-III : To be addressed through convergence with line Departments in Davanagare district</b>		
	Utilize the resource of KVK in preparing the potential linked plan to be prepared by lead bank at district level.		
	KVK Scientists should be used as resource persons in Agriculture Extension Programmes conducted by all the banks in the district.		
	Promote stevia, a medicinal plant in all horticulture farms as well as KVK.		
	Conduct an awareness programme on importance of medicinal plants at KVK in collaboration with department of horticulture.		
	Capacity building of polyhouse growers in collaboration with horticulture department.		
	By utilizing schemes in horticulture department, establish a tomato processing unit for one of FPO's in Davanagere district.		
	Better and optimum utilization of AIR in dissemination of technologies.		
	Submit the proceedings of SAC meeting to Government for further action.		



**PART II - DETAILS OF DISTRICT****2.1 Major farming systems/enterprises:**

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

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

Davanagere district is at center of the state and lies in between latitude of 750.30' and 760.30' and longitude of 130.45' and 140.50' with MSL of 602.5 m. The annual average rainfall of the district is 656.9 mm (Actual 463.8 mm 2016). The variety of soil is medium to deep black and red sandy loam (Details in section 2.2). The district is essentially Kharif region and majority Rabi crops will be taken up with the help of irrigation from lower Bhadra canal. (Irrigation -33%) The district comprises of three agro climatic zones of Karnataka as given in section 2.3.

## 2.2 Description of Agro-climatic Zone & major agro ecological situations:

Sl. No	Agro-climatic Zone	Characteristics
1	Northern Dry Zone (Zone III)	The zone comprises Harapanahalli Tq. Major soil types of the zone are black and red soils. The main crops growing in the zone are Ragi, Maize, Jowar, Onion, Chilli, Sunflower and Minner millets, Coconut, Mango and Pomegranate.
2	Central Dry Zone (Zone IV)	Jagalur, Harihara and Davanagere Taluks come under Zone IV. We find red sandy soil mixed with clayey soil land patches of black soil in the zone. Major crops include Maize, Rice, Jowar, Sunflower, Sugarcane, Ragi, Minor millets, Vegetables, Coconut, Arecanut, Beetlevine, Groundnut, and Pomegranate.
3	Southern transitional Zone (Zone VII)	Southern transitional zone includes Channagiri and Honnali taluks. The dominating soil types found are red sandy soil and black cotton soil. Major crops growing the zone are Maize, Rice, Ragi, Cotton, Chilli, Jowar, Groundnut, Arecanut, Coconut, Mango and other Commercial crops.

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

## 2.3 Soil type/s

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

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

<b>Unit: Area in Hects., Prodn. In Tonnes, Cotton prodn. In bales of 170 Kg lint, Yield in Kgs/hect. Sugarcane yield in Tonnes/hect</b>				
<b>Sl. No.</b>	<b>Crop</b>	<b>Area</b>	<b>Production</b>	<b>Yield</b>
1	Rice	120876	569926	4715
2	Jowar	12343	29102	2358
3	Ragi	14508	31837	2194
4	Maize	188448	806475	4280
5	Bajra	1502	2410	1605
6	Wheat	232	361	1556
7	Minor Millets	114	91	800
<b>I</b>	<b>Total Cereals:</b>	<b>338278</b>	<b>1440203</b>	
1	Tur (Pigeon pea)	8266	10033	1214
2	Bengalgram	5777	5777	1000
3	Horsegram	1822	2525	1386
4	Blackgram	141	143	1016
5	Greengram	1113	1109	996
6	Cowpea & other	2583	3745	1450
7	Avare	1506	1292	858
<b>II</b>	<b>Total Pulses:</b>	<b>21208</b>	<b>24624</b>	
	Total Foodgrains:	359486	1464827	4075
1	Groundnut	18228	26473	1452
2	Sesamum	136	203	1489
3	Sunflower	4586	5364	1170
4	Castor	350	385	1100
<b>III</b>	<b>Total Oilseeds:</b>	<b>23558</b>	<b>32531</b>	

IV	Commercial Crops:	47360	1459244	
1	Cotton	29267	65723	382
2	Sugarcane Planted	5910	719040	122
2a	Sugarcane Ratoon	6345	674410	106
3	Tobacco (VFC)	16	71	0
3a	Tobacco (Beedi)	5822	0	0
	GRAND TOTAL	430404	2956601	

(Source: Department of Agriculture, Davanagere)

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

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (t /ha)
1	Mango	4376	35279	8.06
2	Banana	5075	76871.46	15.15
3	Lemon	166.43	1369.42	8.23
4	Sapota	981.31	8772.14	8.94
5	Pomegranate	425	5224.36	44.65
6	Papaya	384	8292.50	21.60
7	Tomato	5583.20	98798.30	15.56
8	Brinjal	303.04	4491	14.82
9	Beans	516.96	2745.5	5.31
10	Onion	5340.3	94354.1	11.87
11	Green Chilli	1204.14	17810.91	14.79
12	Bhendi	439.11	2039.56	4.64
13	Radish	214.93	1914.61	8.91
14	Capsicum	158.60	1962.42	12.37
15	Cabbage	155.80	3461.68	22.22
16	Khol-Knol	180.96	3394.39	18.76
17	Clusterbean	135.65	918.22	6.77
18	Muskmelon	122.50	1655	13.51
19	Drumstick	159.08	459.11 Lakh Sticks	2.89
20	Watermelon	343	5741.10	16.64

21	Bitterguard	124.50	862.22	6.93
22	Ridge gourd	158.65	1238.61	7.81
23	Cucumber	194.44	2992.91	15.39
24	Coconut	14897	2559.14 Lakh Nuts	0.1718
25	Arecanut	42884	73268.23	1.71
26	Pepper	220	4.40	0.02
27	Betelvine	1137.73	3768.90 Lakh Leaves	3.31
28	Oil palm	1739.79	10286.98	4.71
29	Cocoa	816	597.32	0.73
30	Marigold	1047.85	3885.85	3.71

Source: Department of Horticulture, Davanagere

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	111371	41975	6 liter/day
<i>Indigenous</i>	283752	--	
Buffalo	223601	--	
Sheep			
Exotic (Sheep)	22	--	--
<i>Indigenous</i>	333435	--	--
Goats	153940	--	--
Pigs			
<i>Crossbred</i>	01	--	--
<i>Indigenous</i>	6492	--	--
Rabbits	170	--	
Poultry			
Hens	2054012	--	--

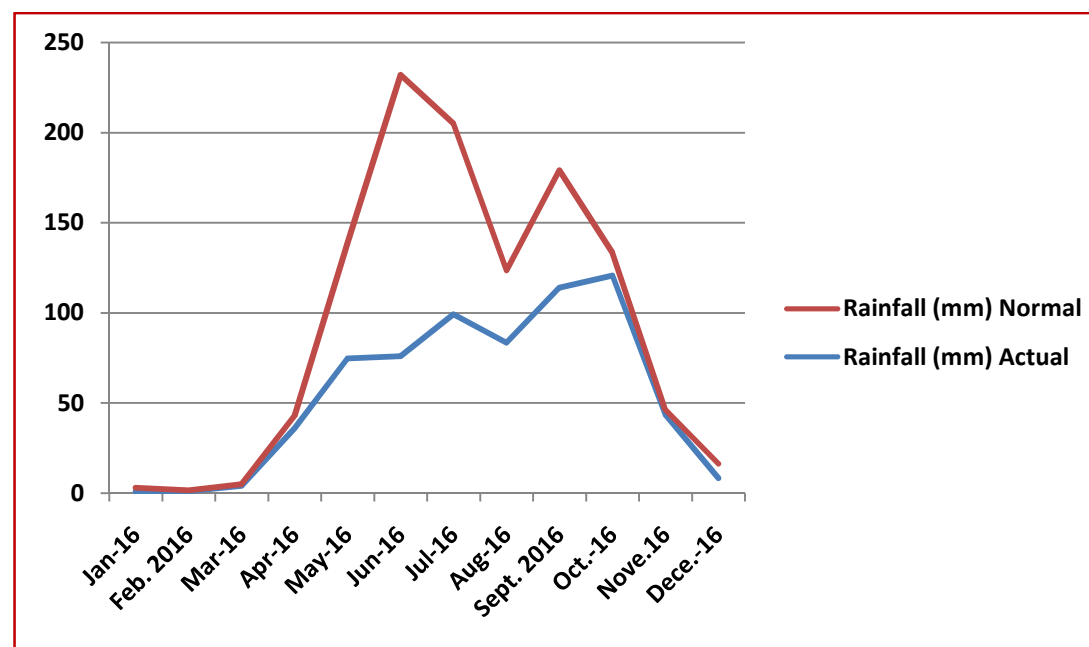
Category	Area	Production (tons)	Productivity kg/ha
Inland	--	16052.53	800

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

## 2.6. Weather data (2016):

Month	Rainfall (mm)	
	Normal	Actual
January 2016	0.9	2.1
February 2016	1.0	0.6
March 2016	4.1	0.9
April 2016	36.0	6.9
May 2016	74.7	63.8
June 2016	76.0	155.9
July 2016	99.3	105.6
August 2016	83.5	40.0
September 2016	114.0	65.1
October 2016	120.7	12.5
November 2016	43.7	2.7
December 2016	8.3	8.0
TOTAL	662.2	463.8 (-31%)

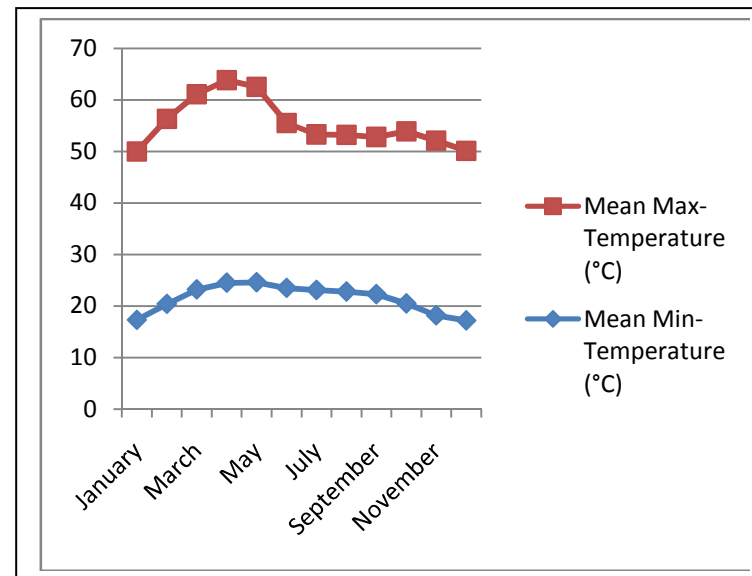
\* Dept. of Agriculture, Davanagere



## Davanagere District Temperature 2016

Month	Mean Min-Temperature (°C)	Mean Max-Temperature (°C)
January	17.3	32.7
February	20.4	35.9
March	23.2	37.9
April	24.5	39.3
May	24.6	37.9
June	23.5	32.0
July	23.1	30.2
August	22.8	30.4
September	22.3	30.5
October	20.5	33.4
November	18.2	33.9
December	17.2	32.9

Source: KSNDMC, Bengaluru



## 2.7 District profile has been Updated for 2016-17: Yes

## 2.8 Details of Operational area / Villages

Taluk Name	Name of the block	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	2	3	4	5	6	7
Channagiri	Santhebennur	Doddabbigere	1 years	Mango	<ul style="list-style-type: none"> <li>• Low yield</li> <li>• Old age orchards</li> <li>• Stem borer incidence</li> <li>• Fruit fly incidence</li> </ul>	Integrated Crop Management
Davanagere	Mayakonda	Shyagale	3 years	Marigold	<ul style="list-style-type: none"> <li>• Lack of good varieties</li> <li>• Low yield</li> </ul>	Integrated Crop Management
Davanagere	Mayakonda	Shyagale	3 years	Coconut	<ul style="list-style-type: none"> <li>• Poor yield</li> <li>• Non use of interspace</li> </ul>	Integrated Crop Management
Davanagere	Mayakonda	Kodaganur	1 years	Chinaaster	<ul style="list-style-type: none"> <li>• Lack of good varieties</li> <li>• Low yield</li> </ul>	Integrated Crop Management
Davanagere	Anagodu	Siddanuru	5 year	Arecanut	<ul style="list-style-type: none"> <li>• Water prolem</li> <li>• Hidimundige syndrome</li> <li>• Nut splitting</li> <li>• Kolergoga</li> <li>• Improper nutrient management</li> <li>• Absence of suitable intercrops</li> <li>• Labour problem</li> <li>• Deficiency of boron and potassium</li> <li>• Dropping and shedding of nuts</li> </ul>	Integrated Crop Management



Harihara	Malebennur	Kumbalur	2 year	Coconut	• Poor utilization of interspace	Integrated Crop Management
					• Lower yield level	
					• Premature nut dropping	
					• Anaberoga and mites	
					• Nut cracking	
Harapanahalli	Chigateri	Kadabagere	3 years	Onion	• Low yield	Integrated Crop Management
					• Lack of good quality seeds	
					• Purple blotch	
					• Thrips	
Davanagere	Mayakonda	Annapura Shyagale Siddanur	2 years	Redgram	• Low yield	ICM
					• No seed treatment with biofertilizers	
					• Use of local varieties	
					• Incidence of pod borer & wilt	
Davanagere	Bilichodu	Tarehalli	1 year	Maize	• Low yield	IPDM
					• No seed treatment with biofertilizers	
					• Incidence of stem borer and sheath blight blight	
Harapanahalli	Arasikere	Kuremaganahalli	4 year	Banana	• Sigatoka leaf spot	IDM
					• Skipper problem	
					• No use of bio fungicides	
Davanagere	Davanagere	Halebisleri	4 year	Banana	• Skipper problem	IPM
					• No use of bio fungicides	

Harapanahalli	Chigateri	Myduru	1 year	Finger Millet	• Low yield	ICM
					• Non- availability of HYV	
					• No seed treatment with bio-fertilizers	
Harapanahalli	Chigateri	Hunsehalli	2 years	Foxtail millet	• Low yield	ICM
					• Non- availability of HYV	
					No seed treatment with bio- fertilizers	
Davanagere	Maykonda	Shygale	2 years	Field Bean	• Low yield	ICM
					• No seed treatment with Bio fertilizers	
					• Non-availability of HY varieties.	
					• Improper nutrient management	
					• Poda borer	
Harapanahalli	Chigateri	Hunsehalli and Sasvehalli	2 yeara	Bengal gram	• Low yield	ICM
					• No seed treatment with Bio fertilizers	
					• Non-availability of HY varieties.	
					• Pod borer and wilt	
					• Improper nutrient management	
Harapanahalli	Chigateri	Myduru	1 year	Bengal gram	• Low yield	ICM
					• No seed treatment with Bio fertilizers	
					• Non-availability of HY varieties.	
					• Pod borer and wilt	
					• Improper nutrient management	
Harapanahalli	Chigateri	Myduru	1 year	Sunflower	• Low yield	ICM
					• No use of ZnSO <sub>4</sub> and boron	
					• Higher incidence of bud necrosis and head borer	

Davanagere	A.Basapura	A.Basapura	2 years	Dairying, sheep & goat rearing,	• Low milk production,	Livestock Nutrition Management
					• Repeat breeding	
					• Weakness in Crossbred cattle & Clean and Quality milk production	
Harapanahalli	Arasikere	Kuremaganahalli,Ramanagara, Chatnahalli	4 years	Sheep and Goat rearing	• Rearing of local breeds	Livestock Nutrition Management & Clean Milk Production.
					• Lack of balanced nutrition	
					• Parasitic infestation	
Honnali	Malligenahalli	Belagutti	2years	Dairyimg	• Low milk production,	Livestock Nutrition Management
					• Repeat breeding & weakness in Crossbred cattle	
					• Clean and Quality milk production	

### 2.9 Priority thrust areas

Sl. No.	Thrust area
1	ICM in Maize, Finger Millet, Sorghum, Cotton, Redgram, Bengalgram, Banana, Field bean, Sunflower. Arecanut, coconut, onion, Mango, Flower crops,
6	Livestock Nutrition management
7	Clean milk production

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

<b>OFT</b>				<b>FLD</b>			
<b>1</b>				<b>2</b>			
<b>Number of OFTs</b>		<b>Number of farmers</b>		<b>Number of FLDs</b>		<b>Number of farmers</b>	
<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
6	3 3 (Not implemented) 1 (2015-16)	21  3 (2015-16)	10  3 (2015-16)	14	9 3 (Continued) 2 not implemented	140	130
				04 (2015-16)	4 (2015-16)	25 (2015-16)	25 (2015-16)
				NFSM-3	2 1 (Continued)	75	75
				NMOOP-1	1	65	65
				FFS-1	1	25	25

<b>Training</b>				<b>Extension Programmes</b>			
<b>3</b>				<b>4</b>			
<b>Number of Courses</b>		<b>Number of Participants</b>		<b>Number of Programmes</b>		<b>Number of participants</b>	
<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
57	69	1520	2687	639	535	8985	33119

<b>Seed Production (Qtl.)</b>		<b>Planting materials (Nos.)</b>	
<b>5</b>		<b>6</b>	
<b>Target</b>	<b>Achievement</b>	<b>Target</b>	<b>Achievement</b>
14	1.57	24500	24736

<b>Livestock, poultry strains and fingerlings (No.)</b>		<b>Bio-products (Kg)</b>	
<b>7</b>		<b>8</b>	
<b>Target</b>	<b>Achievement</b>	<b>Target</b>	<b>Achievement</b>
5000	3161	15825	19166

**3.B1. Abstract of interventions undertaken based on thrust areas identified for the district:**

Sl. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions	
				Title of OFT if any	Title of FLD if any
1	2	3	4	5	6
1	Integrated Crop Management	Arecanut	<ul style="list-style-type: none"> <li>• Water prolem</li> <li>• Hidimundige syndrome</li> <li>• Nut splitting</li> <li>• Koleroga</li> <li>• Improper nutrient management</li> <li>• Absence of suitable intercrops</li> <li>• Labour problem</li> <li>• Deficiency of boron and potassium</li> <li>• Dropping and shedding of nuts</li> </ul>		Integrated Crop Management in Arecanut
2	Intercropping in Coconut	Coconut	<ul style="list-style-type: none"> <li>• Poor utilization of interspace</li> <li>• Lower yield level</li> <li>• Premature nut dropping</li> <li>• Anaberoga and mites</li> <li>• Nut cracking</li> </ul>		Drumstick (KDM-1) as inter crop in Coconut gardens
3	Intercropping in Coconut	Coconut	<ul style="list-style-type: none"> <li>• Poor utilization of interspace</li> <li>• Lower yield level</li> <li>• Premature nut dropping</li> <li>• Anaberoga and mites</li> <li>• Nut cracking</li> </ul>	Flowers as Intercrop in Coconut Garden	
4	Integrated Crop Management	Marigold	<ul style="list-style-type: none"> <li>• Lack of good varieities</li> <li>• Low yield</li> </ul>		Introduction of Arka Agni Marigold as intercrop in Young Arecanut gardens

5	Integrated Crop Management	Onion	• Low yield		Production technology of HYV Bhima Super in Davanagere District
			• Lack of good quality seeds		
			• Purple blotch		
			• Thrips		
6	Integrated Crop Management	China Aster	• Lack of good varieties		Popularization of China aster variety Arka Kamini In Davanagere District
			• Low yield		
7	Integrated pest Management	Banana	• Banana skipper	Assessment of different molecules for Banana skipper management	-
8	Integrated disease management	Banana	• Sigatoka leaf spot	-	Integrated management of sigatoka leaf spot in Banana
9	Integrated pest and disease management in Maize	Maize	• Low yield		Integrated crop management in Maize with emphasis on IPDM practices
			• No seed treatment with biofertilizers		
			• Incidence of stem borer and sheath blight blight		
10	Intercrop in Maize	Redgram	• Use of local varieties		Integrated crop management in Redgram - BRG-5
			• No application of bio-fertilizers		
			• Incidence of pod borer and wilt		
11	Integrated Crop Management	Finger Millet	• Low yield	-	Demonstration of HYV Ragi(ML-365) for delayed sowing
			• Non- availability of HYV and drought tolerant		
			• No seed treatment with bio- fertilizers		
12	Integrated Crop Management	Foxtail millet	• Low yield	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed	
			• Non- availability of HYV		
			• No seed treatment with bio- fertilizers		

13	Integrated Crop Management	Field Bean	• Low yield		Integrated Crop Management practice in Field Bean (Hebbal Avare-4)
			• No seed treatment with Bio fertilizers		
			• Non-availability of HY varieties.		
			• Improper nutrient management		
			• Poda borer		
14	Integrated Crop Management	Sunflower	• Low yield		Integrated Crop Management in Sunflower
			• No use of ZnSO <sub>4</sub> and boron		
			• Higher incidence of bud necrosis and head borer		
15	Integrated Crop Management	Bengal gram	• Low yield	Assessment of Bengalgram Variety for Wilt and Drought	
			• No seed treatment with Bio fertilizers		
			• Non-availability of HY varieties.		
			• Pod borer and wilt		
			• Improper nutrient management		
16	Integrated Crop Management	Bengal gram	• Low yield		Integrated Crop Management in Bengalgram
			• No seed treatment with Bio fertilizers		
			• Non-availability of HY varieties.		
			• Pod borer and wilt		
			• Improper nutrient management		
17	Integrated Crop management	Cotton	• Improper nutrient management		Integrated Crop Management in Cotton
			• Square dropping		
			• Leaf reddening		
			• Improper spacing		
			• Sucking pest		
18	Integrated Crop management	Sorghum	• Imbalanced nutrient management		Integrated Crop Management in Sorghum
			• Soil moisture stress		
			• Rust		
			• Stem borer		
19	Integrated Crop management	Chilli	• Sucking pest incidence		Integrated Crop Management in Chilli
			• Improper nutrient Management		

20	Integrated Nutrient Management	Onion	<ul style="list-style-type: none"> <li>• Imbalanced nutrient management</li> <li>• Less pungency</li> <li>• Small bulb</li> </ul>	Role of sulphur in improving the productivity of onion	
21	Nutrition Management	Dairying	<ul style="list-style-type: none"> <li>• Inefficient utilization of available feeding resources leading to high production cost in Dairy animals</li> </ul>	Effect of feeding urea treated Paddy straw along with grain mix for better performance in Dairy animals	-
22	Livestock Nutrition and Management	Sheep and Goat	<ul style="list-style-type: none"> <li>• Parasitic infestation</li> <li>• Animal exposed to various agro climatic condition.</li> <li>• Lack of balanced nutrition</li> </ul>	-	Balanced feeding and total deworming in small ruminatore for better performance.
23	Nutrition and Management	Fodder	<ul style="list-style-type: none"> <li>• Lack fodder/ Fertility problem /low quality milk</li> </ul>	-	Fodder cafeteria
24	Nutrition and Management	Dairy	<ul style="list-style-type: none"> <li>• Under nutrition and unscientific management of dairy animals</li> </ul>	-	Integrated management of Dairy animals for better performance.

## 3.B1. Contd...

Sl. No	Crop/ Enterprise	Interventions							Supply of bio products	
		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.)	No.	Kg
									14	15
1	2	7	8	9	10	11	12	13	14	15
1	Areca nut	-	-	7	-	-	-	1	10	1
2	Coconut	-	-	6	-	-	-	-	-	1
3	Coconut	-	-	-	-	-	-	-	-	-
4	Marigold	1	-	-	-	-	-	-	-	-
5	Onion	1	-	-	-	-	-	-	-	-
6	China Aster	-	-	-	-	-	-	-	-	-



7	Banana	1	-	-	07	-	-	-	-	-
8	Banana	1	-	-	10	-	-	-	<i>Trichoderma harzianum</i>	17 kg
9	Maize	1	-	-	09	BRG-2: 30kg	-	-		PSB-15 kg
10	Redgram	1	-	-	18	BRG-5: 125kg	-	-	Funnel trap- 250 nos Heli lures- 120 nos. Spodo lures- 130 nos.	PSB- 25 kg
11	Finger Millet	02	-	01	12	1.25	-	-	-	-
12	Foxtail Millet	01	-	-	09	0.45				PSB -3 kg
13	Field Bean	02	-	-	15	0.60			Neem Oil	5 l
14	Sunflower	03	-	02	-	--	-	-	Neem Oil	32.5 l
15	Bengal gram	02	-	01		1.20			Pheromone trap Heli lure	100 200
16	Bengal gram	03	-	01		--			Pheromone trap Heli lure	100 200
17	Cotton	2			11				Pheromone trap-100 Yellow sticky trap- 200	-
18	Sorghum	1			05					PSB-10kg Azatobactor- 10 kg
19	Chilli	1			4					
20	Onion									PSB-5kg
21	Dairying	01	-	05	-	-	-	-	-	-
22	Sheep and Goat	1	-	-	01	-	-	-	-	-

23	Fodder & fodder	6	-	1	03	20.0	15000	-	-	-
24	Dairying	2	1	-	13	-	-	-	-	-

### 3.B2. Details of technology used during reporting period

Technology Refinement: Nil

#### Technology Assessments

##### 1. Foxtail Millet

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed situated	UAS,Dharawad UAS,Raichur	Foxtail Millet	01	-	01	-								
No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
03	-	-	-	-	-	-	-	54	-	-	-	-	-	-	-

## 2. Bengal gram (Chickpea)

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
2	Assessment of Bengalgram Variety for Wilt and Drought tolerance	UAS,Dharwad JNKVV & ICRISAT, 2009 UAS,Raichur	Bengal gram	01	-	02	-								
<b>No. of farmers covered</b>															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
03	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-

## 3. Banana (2015-16)

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Assessment of different molecules for Banana skipper management	UAS (Bengaluru)	Banana	1		1	-								
<b>No. of farmers covered</b>															
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	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-

**4. Banana :** Not implemented due to no incidence of Banana skipper

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Assessment of different molecules for Banana skipper management	UAS (Bengaluru)	Banana	1	-	-	-								
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	-	-	-	-	-	-	-

**5. Onion :** Could not implement due to insufficient soil moisture in operation village.

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Role of sulphur in improving other productivity of onion	DOGR, Pune	Onion	-	-	-	-								
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	-	-	-	-	-	-	-

## 6. Coconut

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Flowers as Intercrop in Coconut Garden (Not Implimented due to non availability of flower seeds)	CPCRI,Kasargod	Coconut	--			
No. of farmers covered							
OFT		FLD		Training		Others (Specify)	
General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16

## 7. Dairying

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Effect of feeding urea treated paddy straw along with grain mixture for better performance in Dairy animals.	NDRI, Kernal	Dairying	1	-	01	Group discussion & method demonstration
No. of farmers covered							
OFT		FLD		Training		Others (Fodder enrichment)	
General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F
4	-	1	-	-	-	12	-

**Fornt Line Demosntrations:****1. Maize**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
2	Integrated crop management in Maize with emphasis on IPDM practices	UAS (Bengaluru)	Maize	-	1	1	-
No. of farmers covered							
OFT		FLD		Training		Others (Specify)	
General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16
-	-	-	-	10	-	5	-
M	F	M	F	M	F	M	F
17	18	19	20	21	22	23	24
12	-	07	-	-	-	-	-

**2. Finger Millet**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
.	Demonstration of HYV Ragi(ML-365) for delayed sowing	UAS, Bangalore	Finger Millet	-	01	02	-
No. of farmers covered							
OFT		FLD		Training		Others (Specify)	
General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16
-	-	-	-	22	-	03	-
M	F	M	F	M	F	M	F
17	18	19	20	21	22	23	24
42	-	06	-	-	-	-	-

## 3. Sorghum

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Integrated Crop management in Sorghum	UAS, Dharwad	Sorghum		1	1	Extension activities-5								
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
Sorghum				08	01	--	01	08	--	--	--				

## 4. Field Bean

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1.	Integrated Crop Management practice in Field Bean (Hebbal Avare-4)	UAS, Bangalore	Field Bean	-	01	02	-								
No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	03	-	02	-	20	-	06	-	-	-	-	-

## 5. Redgram

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
3	Integrated crop management in Redgram - BRG-5	UAS (Bengaluru)	Redgram	-	1	1	Field day-01								
<b>No. of farmers covered</b>															
<b>OFT</b>				<b>FLD</b>				<b>Training</b>				<b>Others (Specify)</b>			
<b>General</b>		<b>SC/ST</b>		<b>General</b>		<b>SC/ST</b>		<b>General</b>		<b>SC/ST</b>		<b>General</b>		<b>SC/ST</b>	
<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	22	1	2	-	11	1	2	-	51	04	02	--

## 6. Bengal gram (Chickpea)

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1.	Integrated Crop Management in Bengal gram	UAS,Dharwad	Bengalgram (Chickpea)	-	01	03	-								
<b>No. of farmers covered</b>															
<b>OFT</b>				<b>FLD</b>				<b>Training</b>				<b>Others (Specify)</b>			
<b>General</b>		<b>SC/ST</b>		<b>General</b>		<b>SC/ST</b>		<b>General</b>		<b>SC/ST</b>		<b>General</b>		<b>SC/ST</b>	
<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	23	-	02		47	-	07	-	-	-	-	-

## 7 Arecanut (2015-16)



Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
	Integrated Crop Management in Arecanut	UAS (Bengaluru)	Arecanut		1	1									
<b>No. of farmers covered</b>															
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
-	-	-	-	4	-	1	-	33	-	5	-	-	-	-	--

**8. Coconut (2015-16)**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
	Drumstick (KDM-1) as intercrop in Coconut gardens	UHS (Bagalkote)	Coconut		1	1	-								
<b>No. of farmers covered</b>															
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
-	-	-	-	6	3	-	1	16	-	-	-	-	-	-	--

**9. Banana (2015-16)**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
4	Integrated management of sigatoka leaf spot in Banana	UAS (Bengaluru)	Banana	-	1	1	-								
<b>No. of farmers covered</b>															
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
-	-	-	-	4	-	1	-	9	-	1	-	-	-	-	-

**10. Marigold**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
	Introduction of Arka Agni Marigold as intercrop in Young Arecanut gardens	IIHR, Bangalore	Marigold		1										
<b>No. of farmers covered</b>															
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		2									

**11. Sunflower**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1.	Integrated Crop Management in Sunflower	UAS,Bangalore	Sunflower	-	01	03	-								
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
-	-	-	-	44	-	21	-	125	-	44	-	-	-	-	-

## 12. Chilli (2015-16)

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Integrated Crop management in Chilli	IIHR, Bengaluru	Chilli		1	1	Extension activities-4								
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
			05	--	--	--	08	--	02	--	--	--	--	--	

## 13. Cotton

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Integrated Crop management in Cotton	UAS, Bengaluru	Cotton		1	2	Extension activities-11								
No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	17	01	2	--	24	01	04	-	-	-	-	-

**14. Onion: Could not complete due to scarcity of rains.**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
	Production technology of HYV Bhima Super in Davanagere District	IIHR, Bangalore	Onion		1	1									
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
-				4		1		7		2					

**15. China Aster: Not implemented due to non availability of Seeds.**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
	Popularization of China aster variety Arka Kamini In Davanagere District	IIHR, Bangalore	China Aster	--	--	--	--								
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
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**16. Sheep and Goat**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
1	Balanced feeding and total deworming in small ruminants for better performance.	KVAFSU	Sheep and Goats rearing	-	1	1	Group Meeting Field visit & Method Demonstration.								
No. of farmers covered															
OFT				FLD				Training				Method demonstration)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-	-	-	-	1	-	7	2	14	-	4	2	5	-	8	2

**17 Fodder**

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
23	Fodder cafeteria	KVA & FSU (Bengaluru)	Mixed Fodder corps	-	1	1	Group discussion-1 Field visit-2								
No. of farmers covered															
OFT				FLD				Training				Method Demo ( Fodder slips preparation)			
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
-	-	-		8	-	2	-	12	-	-	-	8	1	2	-

#### 18. Integrated Management of Dairy Animals

Sl. No.	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted											
				OFT	FLD	Training	Others (Specify)								
1	2	3	4	5	6	7	8								
31	Integrated management of Dairy animals for better performance	KVA & FSU	Dairying	-	1	1	Group discussion-1 Advisory Field visits-2								
No. of farmers covered															
OFT				FLD				Training				Others ( Fodder enrichment)			
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	-	-	-	14	-	4	2	9	1	-	--



**PART IV - On Farm Trial****4.A1. Abstract on the number of technologies assessed in respect of crops**

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation					01 Not implemented			01 Not Implimented		02
	01		01							02
Integrated Pest Management						01				01
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										
<b>Total</b>	<b>01</b>		<b>01</b>			<b>01</b>		<b>01</b>		<b>05</b>

**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									
<b>Total</b>									

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

<b>Thematic areas</b>	<b>Cattle</b>	<b>Poultry</b>	<b>Piggery</b>	<b>Rabbitry</b>	<b>Fisheries</b>	<b>TOTAL</b>
Nutrition Management	01	-	-	-	-	01
<b>TOTAL</b>	<b>01</b>					<b>01</b>

#### 4.A4. Abstract on the number of technologies refined in respect of livestock enterprises

<b>Thematic areas</b>	<b>Cattle</b>	<b>Poultry</b>	<b>Piggery</b>	<b>Rabbitry</b>	<b>Fisheries</b>	<b>TOTAL</b>
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
<b>TOTAL</b>						

#### 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 trail covering all the Technological Options)
Integrated Nutrient Management	Onion	Role of sulphur in improving the productivity of onion	05	05	2.0
Varietal Evaluation	Foxtail millet	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed situated	03	03	1.2 ha
	Bengal Gram	Assessment of Bengalgram Variety for Wilt and Drought	03	03	1.2 ha
Integrated Pest Management	Banana	Assessment of different molecules for Banana skipper management	03	03	1200 plants
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					
<b>Total</b>	04		<b>14</b>	<b>14</b>	

**4.B.2. Technologies Refined under various Crops - Nil**

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail 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					
<b>Total</b>					

**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
Nutrition management	Cattle	Effect of feeding urea treated paddy straw along with grain mixture for better performance in Dairy animals.	05	05
<b>Total</b>			<b>05</b>	<b>05</b>

**4.B.4. Technologies Refined under Livestock and other enterprises**

<b>Thematic areas</b>	<b>Name of the livestock enterprise</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>	<b>No. of farmers</b>
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
<b>Total</b>				

## 4.C1. Results of Technologies Assessed

## Results of On Farm Trial

## 1. Foxtail millet (Navane)

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Foxtail millet	Rainfed	Low yield	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed situated	03	<b>Technology option 1 (Farmer's practice) : HMT-100-1</b>	1.Plant height (cm) 2.Panicle length(cm) 3. Seed weight /panicle	1. 85.9 2. 14.7 3. 6.2	Drought tolerant, Compact Panicle, , Pink hairs in the variety SIA-264 is better compared to other varieties	SIA 2644 and DHFt-109-3 varieties performed better even under severe drought condition		
					<b>Technology option 2: Seed-SIA-2644</b>		1. 95.3 2. 15.9 3. 7.3				
					<b>Technology option 3: DHFt-109-3</b>		1. 94.7 2. 15.3 3. 7.1				

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Rs. / unit)	BC Ratio
13	14	15	16	17	18
<b>Technology option 1 (Farmer's practice) : HMT-100-1</b>	UAS,Dharawad	5.6	q/ha	4,940	1.57
<b>Technology option 2-SIA-2644</b>	UAS, Raichur	7.2		9,220	1.97
<b>Technology option 3- DHFt - 109-3</b>	UAS, Dharawad	7.1		8,700	1.91

## 2. Bengal gram

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Bengal Gram	Rainfed/Irrigated	Low yielding varieties No seed treatment with bio fertilizers Susceptible to stress condition Susceptible to pest and diseases	Assessment of Bengalgram Variety for Wilt and Drought tolerance	03	Technology option 1:JG-11	1. Plant height (cm) 2. No. of pods/plant 3. Wilt Resistant (%) 4. Duration (days)	1.30.6 2.64.3 3.06.8 4.90	GBM-2 is better compared to other varieties. JAKI-9218 is also wilt resistant	GBM-2 is long duration and comes to harvest nearly 100-113 days		
					Technology option 2: JAKI-9218		1.35.7 2.66.5 3.03.0 4.90				
					Technology option 3: GBM-2		1.44.9 2.68.9 3.04.0 4.103				

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Rs. / unit)	BC Ratio
13	14	15	16	17	18
Technology option 1- JG-11	UAS,Dharawad	8.5	q/ha	24950	1.99
Technology option 2-JAKI -9218	JNKVV & ICRISAT	9.3		29670	2.18
Technology option 3-GBM-2	UAS,Raichur	11.5		42350	2.66

## 3. Onion

Crop/enterprise	Farmin g situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Onion	Irrigated	<ul style="list-style-type: none"> <li>• Imbalanced nutrient management</li> <li>• Small bulb</li> <li>• Less pungency</li> </ul>	Role of sulphur in improving the productivity of onion	05	<p>T<sub>1</sub> – Application of 100:75:20 kg N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O/ha along with FYM</p> <p>T<sub>2</sub> – RDF (125:50:125 Kg N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O /ha) along with FYM</p> <p>T<sub>3</sub>- RDF (125:50:125 Kg N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O /ha) along with FYM and 45kg sulphur through elemental sulphur</p>	<ul style="list-style-type: none"> <li>• Size of the bulb</li> <li>• Weight of bulb</li> <li>Yield</li> </ul>	Sowing could not be taken up due to insufficient soil moisture in operational area				

Contd..

<b>Technology Assessed</b>	<b>Source of Technology</b>	<b>Production</b>	<b>Unit</b>	<b>Net Return (Rs. / unit)</b>	<b>BC Ratio</b>
<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
T <sub>1</sub> –Application of 100:75:20 kg N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O /ha along with FYM	Farmers practice	T <sub>1</sub> –Application of 100:75:20 kg N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O /ha along with FYM			
T <sub>2</sub> – RDF (125:50:125 Kg N:P:K/ha) along with FYM	UAS (B)	T <sub>2</sub> – RDF (125:50:125 Kg N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O /ha) along with FYM			
T <sub>3</sub> - RDF (125:50:125 Kg N:P:K/ha) along with FYM and 45kg sulphur through elemental sulphur	DOGR, Pune	T <sub>3</sub> - RDF (125:50:125 Kg N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O /ha) along with FYM and 45kg sulphur through elemental sulphur			

Sowing could not be take due to insufficient soil moisture in operational area



## 4. Banana (2015-16)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Banana	Irrigated	Incidence of banana skipper	Assessment of different molecules for managemen t of banana skipper	03	<b>Technology option 1 (Farmer's practice) :</b> Chlorpyriphos (2ml/l)	1. Yield (t/ha) 2. % Larval mortality 3. Precount 4. Post count 5. Freshly damaged leaves after 15 DAS 6. Freshly damaged leaves after 30 DAS	1) 12.43 2) 70 3) 80 4) 4.24 5) 15 6) Nil 1) 16.87 2) 80 3) 85 4) 17 5) 08 6) Nil 1) 16.48 2) 78 3) 87 4) 20 5) 10 6) Nil 1) 11.24 2) 72 3) -- 4) -- 5) 13 6) Nil	- Spray with Flubendiamid e recorded more larval mortality and recorded higher yield - Observations were recorded from ten plants in each treatment	-Decline in the banana skipper populatio n after 15 days of spraying -Hand picking and destroying of larva is laborious process	--	--
					<b>Technology option 2:</b> Flubendaimide 480SC (0.25 ml/l)						
					<b>Technology option 3:</b> Chlorantran i liorole 18.5SC (0.3 ml/l)						
					<b>Technology option 4:</b> Hand picking & destroying						

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T <sub>1</sub> –Farmers practice-Chlorpyriphos spray (2ml/l)	Farmers practice	12.47	t/ha	1,44,250 /-	2.38
T <sub>2</sub> – Flubendaimide 480SC (0.25 ml/l)	UAS, Bengaluru (Paddy leaf folder)	16.87		2,23,700 /-	2.96
T <sub>3</sub> – Chlorantrani liorole 18.5SC (0.3 ml/l)	KAU(Paddy leaf folder)	16.48		2,15,450 /-	2.88
T <sub>4</sub> - Hand picking & destroying	--	11.24		1,15,150 /-	2.05

### 5. Dairy

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cattle	Semi intensive	Lower production, infertility and repeat breeding in dairy animals	Effect of feeding urea treated paddy straw along with grain mixture for better performance in Dairy animals.	05	<b>Technology option -1 (Farmer's practice) :</b> Feeding dairy animals with paddy straw along with brans/cakes	1)Milk quality (CLR)	1) 1.024 2) 5340.00 3) 18.72	• There is no wastage of fodder and animals like the enriched fodder. This method	• Supply of TMR blocks containing urea-treated straw and grain mixture is beneficial to	--	--
					<b>Technology option- 2:</b> Feeding dairy animals with urea treated paddy straw along with compounded cattle feed and vitamin mineral mixture	2)Cost of feeding (Rs./60 days)	1)1.027 2) 5580.00 3) 12.27				

					<b>Technology option -3:</b> Feeding dairy animals with urea treated paddy straw along with grain mixture, Compounded feed and vitamin mineral mixture	3) cost of milk production (Rs/ l)	1)1.028 2)5190.00 3)10.52	helps in balanced feeding of dairy animals  • Good quality chaff-cutter at reasonable price should be made available to farmers	farmers. • Readymade feed blocks containing all the desired ingredients are beneficial to farmers	--	--
--	--	--	--	--	---	------------------------------------	---------------------------------	---	--	----	----

Technology Assessed	Source of Technology	Production	Unit	Net Return (Rs. / unit)	BC Ratio
13	14	15	16	17	18
Technology option- 1	Farmer's Practice	300.5	Liters/ 60days	2172.60	1.41
Technology option -2	KVAFSU, Bidar	501.58		6959.60	2.25
Technology option- 3	NDRI, Karnal	515.72		7703.2	2.48

**4.C2. Details of each On Farm Trial for assessment:****1. Foxtail millet (Navane)**

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

**2 Problem Definition:** Low yield, No seed treatment with bio fertilizers

**3 Details of technologies selected for assessment:**

Technology Option – 1	Technology Option – 2	Technology Option – 3
HMT-100-1	SiA-2644	DHFt-109-3

**4 Source of technology:**

Technology Option – 1	Technology Option – 2	Technology Option – 3
UAS,Dharawad	UAS(Raichur)	UAS(D)

**5 Production system and thematic area:** Rainfed and Varietal evaluation

**6 Performance of the Technology with performance indicators:**

Technology options	Parameter		
	Plant height (cm)	Panicle length (cm)	Yield (q/ha)
Technology Option – 1. HMT-100-1	85.9	14.7	5.6
Technology Option – 2.SiA-2644	95.3	15.9	7.2
Technology Option – 3.DHFt-109-3	94.7	15.3	7.1

**7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:**

Performance of SiA-2644 foxtail millet variety is better under sever drought condition. Crop suffered dry spells nearly 35 days at grain filling stage.

**8. Final recommendation for micro level situation: --**

**9. Constraints identified and feedback for research:** High Yielding varieites should me made available to farmers.

**10. Process of farmers' participation and their reaction:** Farmers actively participated and expressed that SiA-2644 matures early and yields are high in late kharif. DhFt109-3 had also perfomed well under sever dtrought. Both varieites are suited for drought areas.

**2. Bengalgram****1 Title of Technology Assessed:**

**2 Problem Definition:** Low yield, No seed treatment with bio fertilizers

**3 Details of technologies selected for assessment:**

Technology Option – 1	Technology Option – 2	Technology Option – 3
JG-11	JAKI-9218	GBM-2

**4 Source of technology:**

Technology Option – 1	Technology Option – 2	Technology Option – 3
UAS,Dharawad	JNKVV & ICRISAT	UAS(R)

**5 Production system and thematic area:**Irrigated and Varietal evaluation

**6 Performance of the Technology with performance indicators:**

Technology options	Parameter		
	Plant height (cm)	Duration (days)	Yield (q/ha)
Technology Option – <b>1. JG-11</b>	30.6	90	8.5
Technology Option – <b>2. JAKI-9218</b>	35.7	90	9.3
Technology Option – <b>3. GBM-2</b>	44.9	103	11.5

**7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:**

GBM-2 grows higher than all the other varieties of trial. GBM-2 is long duration and it matures 10-12 days late than JAKI-9218 and JG-11. GBM-2 and JAKI 9218 are tolerant to wilt

**8. Final recommendation for micro level situation:** GBM-2 yields better when two irrigations and suited for mechanical harvesting .

**9. Constraints identified and feedback for research:** High Yielding varieties should be made available to farmers.

**10. Process of farmers' participation and their reaction:** Farmers actively participated and expressed that GBM-2 matures 10 -13 days later than JAKI and JG and yields are better with two protective irrigation. GBM-2 and JAKI 9218 are tolerant to wilt.

### 3. Banana skipper. (2015-16)

1 **Title of Technology Assessed:** Assessment of different molecules for management of banana skipper.

2 **Problem Definition:** Incidence of banana skipper

3 **Details of technologies selected for assessment:**

Technology options	Details of technology
Technology Option – 1	Chlorpyrifos spray (2ml/l)
Technology Option – 2	Flubendaimide 480SC (0.25 ml/l)
Technology Option – 3	Chlorantraniliorole 18.5SC (0.3 ml/l)
Technology Option – 4	Hand picking & destroying

4 **Source of technology:**

Technology options	Source of technology
Technology Option – 1	--
Technology Option – 2	UAS, Bengaluru (Paddy leaf folder)
Technology Option – 3	KAU(Paddy leaf folder)
Technology Option – 4	--

5 **Production system and thematic area:** Irrigated and Integrated Crop management

6 **Performance of the Technology with performance indicators:**

SI No	Particulars	Farmers Practice	Technology option 1	Technology option 2	Technology option 3
1	Pre -count	80	85	87	-
2	Post- count	24	17	20	-
3	% Larval mortality	70.0	80.0	78.0	72.0
4	Freshly damaged leaves 15 DAS	15.0	8.0	10.0	13.0
5	Freshly damaged leaves 30 DAS	Nil	Nil	Nil	Nil
6	Yield (t/ha)	11.43	16.87	16.48	11.24

- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques:** Decline in the banana skipper population after 15 days of spraying
- 8 Final recommendation for micro level situation:** Spray with Flubendaimide recorded more larval mortality
- 9 Constraints identified and feedback for research:** --
- 10 Process of farmers participation and their reaction:** Hand picking and destroying of larva is laborious process

#### 4. Dairying

- 1 Title of Technology Assessed:** Effect of feeding urea treated paddy straw along with grain mixture for better performance in Dairy animals.
- 2 Problem Definition:** Lower production, infertility and repeat breeding in dairy animals
- 3 Details of technologies selected for assessment:**

Technology options	Details of technology
Technology Option – 1	Feeding dairy animals with paddy straw along with brans/cakes
Technology Option – 2	Feeding dairy animals with urea treated paddy straw along with compounded cattle feed and vitamin mineral mixture
Technology Option – 3	Feeding dairy animals with urea treated paddy straw along with grain mixture,compounded feed and vitamin mineral mixture

#### 4 Source of technology:

Technology options	Source of technology
Technology Option – 1	Farmer's Practice
Technology Option – 2	KVAFSU, Bidar
Technology Option – 3	NDRI, Kernal



**5. Production system and thematic area:** Semi intensive mixed dairy farming. Nutrition management

**6. Performance of the Technology with performance indicators:**

Technology options	Parameter		
	Milk quality (CLR)	Cost of feeding (Rs./60 days)	Milk Yield (Litres/60 days)
Technology Option – 1	1.024	5340.00	300.5
Technology Option – 2	1.027	5580.00	501.5
Technology Option – 3	1.028	5190.00	515.75

**7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:**

This technology is helpful in better utilization of poor quality feeding stuffs and also in reducing the feeding cost of milch animals.

**8. Final recommendation for micro level situation:** Whenever farmers are using urea treated paddy straw, sufficient quantity of energy should be supplemented in the form of starch.

**9. Constraints identified and feedback for research:** Whether continues feeding of urea to milch animals causes reproductive problems? This needs to be studied.

**10. Process of farmers' participation and their reaction:** Farmers are actively participated in the feeding trial and they are convinced about the technology. They say this technology works well when the dry fodders are chopped and fed.

**4. D1. Results of Technologies Refined-NIL**

**PART V - FRONTLINE DEMONSTRATIONS****5.A. Summary of FLDs implemented during 2016-17**

Sl. No.	Category	Farmin g Situatio n	Season and Year	Crop	Variety/ breed	Hybri d	Them atic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievemen t
									Propo sed	Actual	SC/ST	Other s	Tota l	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	<b>Oilseeds</b>	Rainfed	Kharif 2016-17	Sunflower	Hybrid	MES H-17	ICM	Integrated crop Management in Sunflower (NMOOP)	26	26	21	44	65	-
2	<b>Pulses</b>	Rainfed	Kharif 2016-17	Redgram	Variety	--	ICM	<ul style="list-style-type: none"> <li>• Use of BRG-5 medium duration wilt resistant variety</li> <li>• Use of <i>Rhizobium</i>, PSB and VAM 1kgeach/ha</li> <li>• Spray with pulse magic (UAS, Raichur) 10g/l @ 5kg/ha</li> <li>• Installation of pheromone traps @ 8no. / ha(16 lures)</li> <li>• Spray with profenophos @ 2ml/l- ovicidal- 1 l/ha</li> <li>• Spray with neem based insecticide</li> </ul>	10	10	02	23	25	--

								@3ml/l – 1l /ha • Spray with indaxicarb @0.5ml/l -200 ml / ha						
	<b>Pulses</b>	Rainfed	Kharif	Field Bean	Variety	HA-4	ICM	Integrated crop Management in Field Bean.	02	02	02	03	05	-
		Rainfed	Rabi 2016-17	Chickpea	Variety	JAKI-9218	ICM	Integrated crop Management in Chickpea (NFSM)	10	10	02	23	25	-
3	<b>Cereals</b>	Rainfed	Kharif 2016-17	Maize	Hybrid	Private	IPDM	<ul style="list-style-type: none"> <li>• Seed treatment with <i>Azospirillum</i> and <i>Trichoderma harzianum</i> @ 0.5kg./ha seeds each</li> <li>• Seed treatment with Imidachloprid 5ml/kg of seed</li> <li>• Growing of legume as intercrop @ 5kg/ha</li> <li>• Collection and burning of infected plants</li> <li>• Soil application of ZnSO<sub>4</sub>, FeSO<sub>4</sub> @ 25 kg each/ha and borax 5kg/ha</li> <li>• Spray with Flubendiamide @ 0.1 ml/l</li> </ul>	06	06	10	05	15	--

								(62.5 ml/ha) and Propiconozol @1ml/l (0.25 l/ha)						
4	<b>Millets</b>	Rainfed	Late Kharif 2016-17	Finger Millet	Variety	ML-365	ICM	Demonstration of HYV Ragi(ML-365) for delayed sowing	10	10	03	22	25	-
		Rain fed	Rabi 2016-17	Sorghum	SPV-2217	--	Integ rated Crop Mana geme nt	<ul style="list-style-type: none"> <li>• Seed treatment with <i>Azotobactor</i>, VAM, PSB @ 200g/acre</li> <li>• Seed treatment with Imidachloprid @ 5 ml/kg of seed.</li> <li>• Spraying of 19:19:19 at 30DAS (1kg/acre)</li> <li>• Application of ZnSO<sub>4</sub> – 5kg/acre</li> <li>• Spraying of chlorpyriphos 20EC- @ 2ml/l</li> </ul>	04	04	01	09	10	
5	<b>Vegetables</b>	Rainfed	2016-17	Onion	Bhima Super	--	ICM	Popularization of Bhima Super variety	02	02	01	04	05	Not Impliment ed due to shortage of Rainfall during sowing and Drying of Bore wells

		Irrigated	Summer 2015-16	Chilli	--	Seminis	Integrated Crop Management	<ul style="list-style-type: none"> <li>• Soil test based fertilizer application</li> <li>• Application of bio fertilizers</li> <li>• Spraying imidachloprid 17.8 SL @ 0.5 ml/L Spraying of Vegetable special</li> </ul>	02	02	--	05	05	
6	Flowers	Irrigated	2016-17	Marigold	Arka Agni		ICM	Introduction of Arka Agni Marigold as intercrop in Young Arecanut Gardens	01	01	2	3	05	Crop is vitiated due to flood of water from adjoining paddy fields
		Irrigated	2016-17	China aster	Arka Kamini		ICM	Popularization of Arka Kamini China Aster variety in Davanagere District	01	01	--	--	--	Not implemented due to non availability of seeds.
7	Ornamental	--	--	--	--	--	--	--	--	--	--	--	--	--
8	Fruit													
		Irrigated	Rabi 2015-16	Banana	Grand naine	--	IDM	<ul style="list-style-type: none"> <li>• Removal of affected leaves and burning</li> <li>• Planting seedlings in spacing (6x6).</li> <li>• Adaptation of</li> </ul>	02	02	01	04	05	--

								drainage system <ul style="list-style-type: none"> <li>• Spray with propiconozol (1ml/L) and carbendizim +mancogeb (2gm/l)</li> <li>• Repeat the spray depending upon incidence</li> <li>• Soil application of trichoderma (12.5 kg/ha)</li> </ul>						
8	<b>Spices and condiments</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
9	<b>Commercial</b>	Rain fed	Kharif-2016	Cotton		Bt-cotton (Vikram)	Integrated Crop Management	<ul style="list-style-type: none"> <li>• Maintaining Proper spacing</li> <li>• Spraying Fipronil 80WG@ 0.2g/l against sucking pests</li> <li>• Spraying of 1% MgSO<sub>4</sub> + 1% KNO<sub>3</sub> at 90 and 110 DAS</li> <li>• Spraying of planofix (1ml/4.5 l of water) at flowering stage</li> </ul>	08	08	02	18	20	

								• Yellow sticky trap for sucking pest.						
10	<b>Medicinal and aromatic</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
11	<b>Fodder</b>	Irrigated	Kharif 2016-17	Mixed fodder crop	Napier X + MP Charry Jowar + Lucerne + Sesben ia spp.	-	ICM	• Growing of leguminous and non-leguminous fodder crops (Fodder cafeteria establishment)	02	02	02	08	10	--
12	<b>Plantation</b>	Irrigated	2015-16	Arecanut	Channa giri Local		ICM	ICM in Arecanut	01	01	01	04	05	--
		Irrigated	2015-16	Coconut	KDM-1		Intercropping	Drumstick(KDM-1) as intercrop in Coconut garden	04	04	01	09	10	--
13	<b>Fibre</b>													
14	<b>Dairy</b>	--	2016-17	Cows	HFX	--	INM	• Balanced Feeding of dairy animals (Total mixed ration concept)	05	05	--	05	05	--
15	<b>Poultry</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
16	<b>Rabbitry</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
17	<b>Pigerry</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

18	<b>Sheep and goat</b>	--	2016-17	Sheep & Goat	Local	--	INM	• Balanced feeding and total deworming in small ruminants for better body weight gain and reproductive performance.	50 (10 Sheep/ demo)	50 (10 Sheep/ demo)	09	01	10	--
19	<b>Duckery</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
20	<b>Common carps</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
21	<b>Mussels</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
22	<b>Ornamental fishes</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
23	<b>Oyster mushroom</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
24	<b>Button mushroom</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
25	<b>Vermicompost</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
26	<b>Sericulture</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
27	<b>Apiculture</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
28	<b>Implements</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
29	<b>Others (specify)</b>	--	--	--	--	--	--	--	--	--	--	--	--	--



## 5.A. 1. Soil fertility status of FLDs plots during 2016-17

Sl. No.	Category	Farmin g Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thema tic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	<b>Oilseeds</b>	Rainfed	Kharif 2016-17	Sunflower	Hybrid	MSFH-17	ICM	Integrated crop Management in Sunflower (NMOOP)	Kharif2 016-17	H	M	L	Maize
2	<b>Pulses</b>	Rainfed	Kharif 2016-17	Redgram	BRG-5	--	ICM	Integrated crop management in Redgram (BRG-5)	Kharif 2016-17	L	M	H	Maize
		Rainfed	Kharif	Field Bean	Variety	HA-4	ICM	Integrated crop Management in Field Bean.	Kharif 2016-17	L	M	M	Ragi
		Rainfed	Rabi 2016-17	Chickpea	Variety	JAKI-9218	ICM	Integrated crop Management in Chickpea (NFSM)	Rabi 2016-17	H	M	L	Maize
3	<b>Cereals</b>	Rainfed	Kharif 2016-17	Maize+ Redgram	--	Private	ICM	Integrated crop management in Maize with emphasis on IPDM practices	Kharif 2016-17	M	H	H	Maize
4	<b>Millets</b>	Rainfed	Late Kharif 2016-17	Finger Millet	Variety	ML-365	ICM	Demonstration of HYV Ragi(ML-365) for delayed sowing	Late Kharif 2016-17	H	M	L	Sunflower
		Rainfed	Rabi, 2016-17	Sorghum	SPV-2217	--	Integ rated Crop Man agement	<ul style="list-style-type: none"> <li>Seed treatment with <i>Azotobactor</i>, VAM, PSB @ 200g/acre</li> <li>Seed treatment with Imidachloprid @ 5 ml/kg of seed.</li> <li>Spraying of 19:19:19 at</li> </ul>	Rabi, 2016-17	M	L	M	Maize, Sunflower

								30DAS (1kg/ acre) • Application of ZnSO <sub>4</sub> – 5kg/acre • Spraying of chlorpyrifos 20EC- @ 2ml/l					
5	<b>Vegetables</b>	Irrigated	Summer 2015-16	Chilli	--	Seminis	Integrated Crop Management	<ul style="list-style-type: none"> <li>• Soil test based fertilizer application</li> <li>• Application of bio fertilizers</li> <li>• Spraying imidachlopid 17.8 SL @ 0.5 ml/L</li> <li>Spraying of Vegetable special</li> </ul>	Summer 2015-16	L	M	M	Maize, Sunflower
6	<b>Flowers</b>	Irrigated	Kharif 2016-17	Marigold	Arka Agni	--	ICM	Introduction of Arka Agni marigold variety	Kharif-2016-17	L	M	L	Arecanut
7	<b>Ornamental</b>	--	--	--	--	--	--	--	--	--	--	--	--
8	<b>Fruit</b>												
		Irrigated	Rabi 2015-16	Banana	Grand naine	--	IDM	Integrated management of sigatoka leaf spot in Banana	Rabi 2015-16	L	M	H	--
9	<b>Spices and condiments</b>												
10	<b>Commercial</b>	Rainfed	Kharif -2016	Cotton		Vikram BG-II	INM	<ul style="list-style-type: none"> <li>• Maintaining Proper spacing</li> <li>• Spraying Fipronil 80WG@ 0.2g/l against sucking pests</li> <li>• Spraying of 1% MgSO<sub>4</sub> + 1% KNO<sub>3</sub> at 90 and 110 DAS</li> <li>• Spraying of planofix (1ml/4.5 l of water) at</li> </ul>	Kharif 2016	L	M	H	Maize

								flowering stage • Yellow sticky trap for sucking pest.					
11	<b>Medicinal and aromatic</b>												
12	<b>Fodder</b>	Irrigated	Kharif 2016-17	Mixed fodder crop	Napier X + MP Charry Jowar + Lucerne + Chogache	-	-- ICM	Establishment of fodder cafeteria	Kharif 2016-17	M	M	L	Ragi & Maize
13	<b>Plantation</b>	Irrigated	Kharif 2015-16	Areca nut	Channagiri Local	--	ICM	1. use of green manure crops as intercrops 2. Use of Organic manures and recommended dose of fertilizers 3. Method of fertilizer application 4. Use of drainage in undrained soils 5. Management of pests and Diseases	Khari f 2015-16	L	M	M	Areca nut
		Irrigated	Rabi 2015-16	Coconut Drumstick	Arsikere Tall KDM-1	--	ICM	1. Growing drumstick as intercrop in interspace between Coconut gardens 2. ICM in Coconut	Rabi 2015-16	L	M	M	Coconut
14	<b>Fibre</b>												

### 5.B. Results of Frontline Demonstrations

## 5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demos.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
							H	L	A										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Oilseeds	Inegrated crop Management	-	MSF H-17	Rainfed	65	26	17.9	15.3	16.5	11.3	46.01	27393	72063	44671	2.63	23255	49202	25948	2.12
<b>Pulses</b>																			
Redgram	Integrated crop management in Redgram-	BRG-5	--	Rainfed	25	10	10.8	8.10	9.4	8.5	9.57	11750	31960	20210	2.70	12500	26350	13850	2.11
	Integrated Crop Manangment inField Bean	HA-4	-	Rainfed	05	02	23.5	18.3	20.5	17.3	15.6	16180	30750	14750	1.90	16000	25950	9950	1.62
	Integrated crop management in Bengalgram	JAKI-9218	-	Rainfed	25	10	11.9	9.25	10.83	7.36	32.04	23962	67108.8	43146.8	2.80	21954	45632	23678	2.08
<b>Cereals</b>																			

Maize + Redgram	Integrated crop management in Maize with emphasis on IPDM practices	--	Private	Rainfed	15	06	45.65	33.55	38.77	33.42	16.0	35706	58162	22455	1.62	33688	50138	16499	1.48
Millet	Demonstration of HYV Ragi(ML-365) for delayed sowing	ML-365	-	Rainfed	25	10	31.3	28.9	30.03	25.98	13.4	31616	90855	59239	2.87	31304	74950	43646	2.39
Sorghum	Integrated Crop Management in Sorghum	SPV-2217	--	Rainfed	10	04	12.70	5.10	8.90	7.4	20.3	18250	27590	9340	1.51	16250	22940	6690	1.41
Vegetables																			
Chilli	Integrated Crop Management	--	Semis	Irrigated	05	02	22.70	12.80	17.92	162.32	10.78	43820.00	143856.00	100036.00	3.28	46880.00	129856.00	82976.00	2.77
Flowers	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ornamental	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

<b>Fruit</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Banana</b>	Integrated management of sigatoka leaf spot in Banana	Grand Naine	-	Irrigated	05	02	49.35	38.10	44.18	33.62	31.40	84600	176728	92128	2.08	88960	134504	45544	1.51
<b>Spices and condiments</b>																			
<b>Commercial</b>	Integrated Crop Management in Cotton	--	Vikram BG-II	Rainfed	20	08	2036	11.58	15.40	13.97	10.2	28600.00	75447.75	46847.75	2.64	29300.00	68462.80	39162.80	2.34
<b>Fibre crops like cotton</b>																			
<b>Medicinal and aromatic</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Fodder</b>	Establishment of fodder cafeteria	Napier X + MP Charray Jowar + Lucerne + Chogache	--	Irrigated	10	02	31.6	24.6	28.2	19.8	42.2	18800	28215	9415	1.5	14600	19800	5200	1.35
<b>Plantation</b>																			
<b>Areca nut</b>	ICM	Chan nagiri Local	--	Irrigated	05	01	20.5	15.5	18.0	11.65	54.5	139421-00	360000-00	220578-00	2.57	120396-00	233000-00	112603-00	1.92

Coconut	Intercropping	KDM-1	--	Irrigated	10	04	16925	13205	14555	8492 nuts/ha	71.39	51638-00	174660-00	123021-00	3.38	44113-00	101904-00	57790-60	2.31
<b>Fibre</b>																			

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

Crop	Data on other parameters in relation to technology demonstrated		
	Parameter with unit	Demo	Check
1	2	3	4
<b>Sunflower (NMOOP)</b>	<b>Plant Height (cm)</b>	<b>172.2</b>	<b>167.8</b>
	Head size (cm)	13.85	11.15
	Test weight(1000 seeds)	56.28	47.15
<b>Field Bean</b>	<b>Plant Height (cm)</b>	<b>63.26</b>	<b>52.10</b>
	Pod Borer (%)	4.98	17.86
	No. of Pods/plant (No.)	112.40	101.8
<b>Bengal gram (NFSM)</b>	<b>Plant height (cm)</b>	<b>29.73</b>	<b>25.92</b>
	Incidence of wilt (%)	4.02	11.68
	No. of pods/plant	64.02	51.84
<b>Ragi (ML-365)</b>	<b>Plant height (cm)</b>	<b>114.5</b>	<b>103.73</b>
	No. of tillers/plant	7.984	6.14
	No. of fingers/head	5.9	4.6
	1000 seed weight (g)	26.2	25.1
	Fodder Yield (q/ha)	53.24	49.25
Maize+ Redgram	Plant height of Maize (cm)	165.57	159.67
	Number of rows/cob (No.)	12.93	12.53
	Stem borer incidence in maize (%)	3.0	9.0

Redgram (NFSM)	Germination (%)	83	81
	Plant height (cm)	160.92	152.08
	No. of branches (nos.)	5.82	5.25
	No of pods (nos.)	70.9	61.80
	Pod filling (%)	58.884	51.4
	Pod length (%)	7.10	6.70
	Wilt incidence (%)	3.0	5.0
	Pod borer incidence (%)	4.0	8.0
Banana	Incidence of leaf spot (%)	6.20	18.72
Sorghum	Size of head (cm)	<b>21.3</b>	<b>19.6</b>
	Test weight (g/1000 seed)	<b>40.21</b>	<b>37.15</b>
		<b>7.45</b>	<b>12.94</b>
Cotton	Square dropping (%)		
	Leaf reddening (%)	7.31	21.35
	Sucking pests (No.)	6.86	19.36
Chilli	Number of fruits per plant (No.)	192.76	182.32
	Incidence of leaf curl (%)	9.34	19.38
Arecanut	Number of Inflorescence/plant	7	4
	Unprocessed nuts (kg/plant)	8.97	5.8
	Processed nuts(kg/plant)	1.44	0.93
	Inflorescence Die back(%)	2.46	9.14
Coconut	Coconut yield(nuts/palm)	124	63
	Drumstick yield (pods/plant)	87	--



## 5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demos	No. of Units	Yield (L/Day)				% Increase	*Economics of demonstration Rs./day)				*Economics of check (Rs./day)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
					H	L	A										
<b>Dairy</b>	Integrated management of dairy animals for better performance (Feeding total mixed ration)	Dairy Cow (HF-x)	01	05	12.10	8.07	9.65	8.80	9.6	117	241.25	124.25	2.06	89	130	41	1.46
<b>Poultry</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Rabbitry</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Pigerry</b>																	
<b>Sheep and goat</b>	Balanced feeding and total deworming in small ruminants for better body weight gain	Bellary Local	10	10	70.0 Sheep Body weight in kg/60 days	47.0 Sheep Body weight in kg/60 days	55.3 Sheep Body weight in kg/60 days	46.0 Sheep Body weight in kg/60 days	15.67	4248.0	11060.0	6812.0	2.60	30000.0	6600.0	3600.0	2.2
<b>Duckery</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Others (pl.specify)</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Crop	Data on other parameters in relation to technology demonstrated		
	Parameter with unit	Demo	Check
Dairy animals	Milk quality (CLR)	1.028	1.025
	Incidence of mastitis	Nil	Nil
	Repeat breeding observed	1 out of 5	2 out of 2
Sheep and Goat	Animals attaining puberty (maturity)	76% of the animals attained maturity during the period & taken Ram	Only 40 % of the animals attained maturity & taken Ram

**5.B.3. Fisheries**

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units / Area (m <sup>2</sup> )	Yield (q/ha)			% Increase	*Economics of demonstration Rs./unit) or (Rs./m <sup>2</sup> )				*Economics of check Rs./unit) or (Rs./m <sup>2</sup> )					
					Demo				Check if any	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R	
					H	L	A											
Common carps																		
Mussels																		
Ornamental fishes																		
Others (pl.specify)																		

**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

**.B.4. Other enterprises**

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m <sup>2</sup> }	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
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	

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	

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

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

**5.B.6. Extension and Training activities under FLDs:****1. Maize + Redgram (IPDM)**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	20	Preliminary visit for farmers selection
2	Training	01	17	Integrated agronomic practices and INM for higher yield
3	Field visit to FLD plots	05	67	Diagnostic visit to paddy plot
4	Method demonstration	02	24	Use of bioagent and spraying solution preparation

**2. Sorghum**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	1	17	07/03/2017: Officials from Dept. of Agriculture and Farmers of Nyamathi and surrounding villages were involved
2	Farmers Training	1	08	17/10/2016: Integrated Crop Management in Sorghum
3	Media coverage	1	--	12/03/2017: Information of sorghum variety
4	Training for extension functionaries	--	--	
5	Method demonstrations	01	11	17/10/2016: Seed treatment with calcium chloride and biofertilizers
6	Field visits	03	21	02/01/2017, 09/02/2017, 03/03/2017

## 3. Finger Millet (ML-365)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Group discussion	01	28	Selection of the farmers and farmers field
2	Training	02	48	<b>30-9-2016</b> - Seed treatment of Biofertilisers with Finger millet <b>2-12-2016</b> - Importance of Spraying of WSF in Finger Millet
3	Field visit to FLD plots	05	60	<b>12-10-2016</b> : Attended the sowing <b>25-11-2016</b> : follow up field visit <b>2-12-2016</b> : Suggested sprinkler irrigation
4	Method demonstration	02	48	<b>25-11-2016</b> : preparation of 19 all water soluble fertilisers spray solution and spraying <b>16-12-2016</b> : Follow up field visit and suggested for spraying of Micronutrients
5.	Media Coverage – E-TV, Annadatha	03	-	<b>16-10-2016</b> : Janathavani <b>18-10-2016</b> : Vijaya karnataka (Training on ICM practices in Finger Millet) <b>27-11-2106</b> : Vijaya karnataka (Method demnstration os Spraying WSF)
6.	Field day	01	35	<b>19-01-2017</b> : Condcuted field day in colloboration with Department of Agriculture.

## 4. Bengal gram (Chick pea)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Group discussion	01	30	<b>25-10-2016</b> :Farmer Selection for FLD
2	Training	03	54	<b>02-12-2016</b> : Integrated nutrient management in Bengal gram <b>16-12-2016</b> : Role of Funnel traps in managing pod borer <b>20-12-2016</b> : Importance of Pulse magic in Bengal gram
3	Field visit to FLD plots			<b>02-12-2016</b> : Follow up field visit to FLD plots along with AO and AAO Observed the Pod borer incidence <b>16-12-2016</b> : Follow up field visit and suggested for light irrigation <b>27-12-2016</b> : Follow up field visit and counted the Pod borer insects in the Funnel trap <b>19-01-2017</b> : Officers and Elected representatives visited the plots
4	Method demonstration	02	38	<b>02-12-2016</b> : Method demonstration of Spraying of Ovicide @ 2ml/L <b>16-12-2016</b> : Installation of Funnel Trap and Heli lure method demonstration <b>20-12-2016</b> : Pulse Magic solution preparation @ 5g/l and time and method of spraying
5.	Media Coverage – E-TV, Annadatha			<b>17-12-2016</b> : Role of Pulse Magic in Bengalgram (Janatha vani) <b>30-12-2016</b> : Vijayakarnataka <b>23-01-2017</b> : Field day -Vijayakarnataka
6.	Field day	01	62	<b>19-01-2017</b> : Conducted in collaboration with Department of Agriculture: Mrs Spoorthy , Deputy Director of Agriculture, Mr. Thippeswamy ,ADA, Harapanahalli, Mr.Nagaraju Agriculture officer, AAO and field assistants Mrs Manjula NFSM, Officer <b>Government elcted representatives</b> : Dr Dr .Manjunatha Zilla Panchayat Member ,Davanagere and Mr. O.Ramanna Taluk Panchayat Member visited

### 5. Redgram (ICM)-NFSM

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	02	23	Preliminary visit for farmers selection
2	Training	01	14	Pest and disease management in redgram
3	Field visit to FLD plots	11	118	Diagnostic visit to paddy plot
4	Method demonstration	02	25	Trap installation and spraying solution preparation
5.	News paper coverage	01	--	Seedling treatment with biofertilizers
6.	Field day	01	57	Experience sharing of farmers

### 6. Field Bean (Hebbal Avare)

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Group discussion	01	15	<b>21-06-2016:</b> Group discussion with Department of Agriculture and Farm Facilitators of Maykonda RSK
2	Training	02	26	<b>12-06-2016:</b> Seed treatment with Chemicals and Bio fertilisers in Avare <b>28-07-2016:</b> Management of Sucking pests and Pod borer
3	Field visit to FLD plots	03	35	<b>28-07-2016:</b> Sucking pest and Pod borer infestation and suggested the suitable measure. <b>19-08-2017:</b> Senior scientist and Head visited the plots and interacted with farmers <b>9-11-2016:</b> Follow up field visit and Pod borer incidence observed
4	Method demonstration	02	25	<b>28-07-2016:</b> Method demonstration on spray solution mixture and Weed control through cycle weeder
5.	Media Coverage – E-TV, Annadatha	04	-	<b>16-7-2016:</b> Field Bean Demonstration (Vijay Karnataka) <b>30-7-2016:</b> Follow field visit to Field bean plot at Shygal (Vijay Karnataka) <b>09-10-2016:</b> Field Day in Field bean (Janatha Vani) <b>26-10-2016:</b> Improved production technology in pulses.
6.	Field day	01	19	<b>06-10-2016:</b> Conducted field day in collaboration with Department of Agriculture and field visit to the FLD plots

## 7. Oil seeds- Sunflower (NMOOP)

Sl. No.	Activity	No. of activities organised	Number of participants	Remarks
1	Group discussion	01	35	<b>12-06-2016:</b> Discussion with ADA and Ao harpanahalli for selcttion of villages and farmers
2	Training	03	169	<b>30-06--2016-</b> Importance of water soluble fertilsers (19 all) and management of bud necrosis at early stage <b>11-07-2016-</b> Integrated weed management and sucking pest management in sunflower <b>08-08-2016-</b> Integrated Pest and disease management Importance of micronutrient in improving sunflower yield
3	Field visit to FLD plots	07	249	<b>30-06-2016 –</b> ADA ,Ao and AAO Harapnahalli visited the FLD plots <b>11-06 -2016, 11-07-2016, 5-08-2016,</b> <b>13-08-2016- DDA,ADA and Scientists ,UAHS visited the Sunflower Plots</b> <b>22-08-2016, 9-09-2016,11-09-2016,</b> <b>30-09-2016- Dr Sreenath Dixit Visited the FLD plots and interacted with Farmers</b>
4	Method demonstration	02	110	<b>30-06-2016-</b> Preparation of the spray solution of 19:19:19 <b>11-07-2016-</b> Spraying and solution preparation against sucking pests
5.	Media Coverage – E-TV, Annadatha			<b>13-7-2016-</b> :FLD –ICM (Vijaya karnataka) <b>09-08-2016-</b> Training on Managment of diseases in sunflower (Vijaya Karnataka) <b>30-08-2016:</b> Field day (Vijaya karnataka) <b>03-10-2016-</b> Dr Sreenath Dixit visited the FLD sunflower plots and interacted with farmers-(Vijaya Karnataka)
6.	Field day	01	67	<b>22-08-2016:</b> Field day conducted in colloboration with department of Agricuclutre ,Harpanahalli.



**8. Cotton**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	1	43	21/10/2017: Officials From Dept. Of Agriculture, UAHS, Shimogga, Central Plant Quarantine Institute, Bengaluru and farmers of Kadabagere and surrounding villages were involved.
2	Training	2	29	11/07/2017: Integrated Nutrient Management in Cotton 09/09/2017: Role of magnesium sulphate in cotton production
3	Field visit to FLD plots	2	--	14/09/2016: Information on leaf reddening management 08/10/2016: Field visit
4	Method demonstration	--	--	
5.	Field day	03	94	11/07/2016: Spraying of Fipronil 80 WG and use yellow sticky trap for management of sucking pest 13/08/2016: Spraying of Magnesium sulphate and growth regulators 21/10/2016: Installation of pheromone trap for management of pink boll worm
		06	157	11/07/2016, 05/08/2016, 13/08/2016, 22/08/2016, 09/09/2016, 30/09/2016, 21/10/2016

**9. Coconut**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	1	18	For selection of farmers
2	Training	1	15	Training on production technology of Drumstick
3	Field visit to FLD plots	3	--	Regular follow up visit to Fld plots
4	Method demonstration	1	15	Pinching in Drumstick
5.	Media Coverage – E-TV, Annadatha	1		News paper coverage

**10. Arecanut (2015-16)**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	15	For selection of Farmers
2	Training	02	20	To impart training on integrated management of Arecanut
3	Field visit to FLD plots	06	--	Regular follow up visits for imparting technologies
4	Method demonstration	02	20	Removal of Inflorescence and spray of micronutrients
5.	Media Coverage – E-TV, Annadatha	02		News Paper clippings and E tv programme on ICM in Arecanut.

**11 Banana (IDM) -2015-16**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Group discussion	01	14	Preliminary visit for farmers selection
2	Training	01	05	Integrated Management of sigatoka leaf spot in banana
3	Field visit to FLD plots	04	33	Diagnostic visit
4	Method demonstration	03	21	Spraying solution preparation
5.	Field day	01	11	Experience sharing

**12. Chilli**

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	--	--	--
2	Farmers Training	1	10	09/04/2016: Integrated Crop Management in Chilli
3	Media coverage	--	--	--
4	Training for extension functionaries	--	--	--
5	Method demonstrations	01	10	17/05/2016: Spraying of vegetable special
6	Field visits	02	16	09/04/2016, 17/05/2016

**13. Dairy**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	15	Discussed about feeds and feeding method;ogies adopted in the village
2	Training	01	20	Conducted 1-day On-campus training programme on 'Balanced Feeding in Livestock and the role of fodder in profitable livestock farming.
3	Field visit to FLD plots	02	16	Visited the FLD plots on 22-11-2016 and 21-01-2017
4	Method demonstration	01	20	Fodder enrichment using Vitamins and minerals.

**14. Balanced feeding& total deworming in small Ruminants**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	16	Discussed about the small ruminants rearing system and availability of feed and fodder resources in the village
2	Training	01	14	Conducted 1-day On-campus training programme on 'Balanced feeding and total deworming in small ruminants on 21-01-2017
3	Field visit to FLD plots	02	21	Visited the FLD plots on 22-11-2016 and 21-01-2017
4	Method demonstration	01	20	Control fo ectoparasies.

**15 Fodder**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	12	Discussed about feeding practices and fodder availability in the village
2	Training	01	14	Conducted 1-day training programme on 'Balanced feeding in the dairy animalsand the role of fodder in profitable dairy farming.
3	Field visit to FLD plots	02	16	Visited FLD plots on 23-9-2016 and 21-12-2016
4	Method demonstration	01	12	Preparation of fodder rootslips for transplanting.

**PART VI – DEMONSTRATIONS ON CROP HYBRIDS****Demonstration details on crop hybrids**

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
					H	L	A										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>Cereals</b>																	
Bajra																	
Maize	Integrated crop management in Maize with emphasis on IPDM practices	Private	15	06	45.65	33.55	38.77	33.42	16.0	35706	58162	22455	1.62	33688	50138	16499	1.48
Paddy																	
Sorghum																	
Wheat																	
<b>Total</b>																	
<b>Oilseeds</b>																	
Castor																	
Mustard																	
Sunflower	Integrated crop Management	MSF H-17	65	26	17.9	15.3	<b>16.5</b>	11.3	46.01	27393	72063	44671	2.63	23255	49202	25948	2.12
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
<b>Pulses</b>																	

Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
<b>Vegetable crops</b>																	
Bottle gourd																	
Capsicum																	
Cucumber																	
Tomato																	
Chilli																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
<b>Commercial crops</b>																	
Sugarcane																	
Coconut																	
Cotton	Integrated Crop Management in Cotton	Vikar m BG-II (Bt)	20	8	20.36	11.58	15.4	13.97	10.2	28600	75447.75	46847.75	2.64	29300	68462.8	13162.8	2.34
<b>Total</b>																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
<b>Total</b>																	

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

Area of training	No. of Courses	No. of Participants									
		General			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	2	3	4	5	6	7	8	9	10	11	
<b>Crop Production</b>											
Weed Management											
Resource Conservation Technologies											
Cropping Systems											
Crop Diversification											
Integrated Farming											
Micro Irrigation/Irrigation											
Seed production											
Nursery management											
Integrated Crop Management	1	16	0	16	2	0	2	18	0	18	
Soil and Water Conservation											
Integrated Nutrient Management											
Production of organic inputs											
<b>Others</b>											
a) Seed treatment	1	12	0	12	2	0	2	14	0	14	
b) Bio fuel production and use of bioproducts											
<b>Horticulture</b>											
<b>a) Vegetable Crops</b>											
Production of low value and high volume crop											
Off-season vegetables											
Nursery raising											

Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others a)Kitchen garden and terrace gardening	2	1	62	63	53	0	53	54	62	116
<b>b) Fruits</b>										
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										
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others a)										
<b>d) Plantation crops</b>										
Production and Management technology	2	52	0	52	7	0	7	59	0	59
Processing and value addition										
Others 1. Dryland horticulture										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										

Others										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
<b>Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated nutrient management	1	21	12	33	3	0	3	24	12	36
Production and use of organic inputs	1	36	1	37	0	0	0	36	1	37
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others										
<b>Livestock Production and Management</b>										
Dairy Management	2	10	24	34	2	0	2	12	24	36
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	2	18	0	18	5	0	5	23	0	23
Animal Disease Management										



Feed and Fodder technology	1	12	0	12	1	0	1	13	0	13
Production of quality animal products										
<b>Others:</b> a) Preparation of vermicompost										
<b>Home Science/Women empowerment</b>										
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 –Production Technology of Mushroom	1	56	14	70	15	4	19	71	18	89
<b>Agril. Engineering</b>										
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										
<b>Plant Protection</b>										
Integrated Pest Management										

Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
<b>Others a) Apiculture</b>										
<b>Fisheries</b>										
Integrated fish farming	1	6	0	6	0	0	0	6	0	6
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 -1. Recent technologies in aquaculture										
<b>Production of Inputs at site</b>										
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 –Bio-gas production										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (PUC students orientation)	2	172	100	272				172	100	272
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>17</b>	<b>412</b>	<b>213</b>	<b>625</b>	<b>90</b>	<b>4</b>	<b>94</b>	<b>502</b>	<b>217</b>	<b>719</b>

## 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
1	2	3	4	5	6	7	8	9	10	11
<b>Crop Production</b>										
Weed Management	2	82	0	82	16	0	16	98	0	98
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	5	71	0	71	32		32	103		103
Soil and Water Conservation										
Integrated Nutrient Management	3	59	0	59	6	0	6	65	0	65
Production of organic inputs										
Others a) seed treatment	3	112	0	112	7	0	7	119	0	119
c) Mechanized transplanting in paddy										
<b>Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high volume crop	1	7	0	7	2	0	2	9	0	9
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	33	19	52	0	0	0	33	19	52
Other (Kitchen and Terrace garden)										

1	2	3	4	5	6	7	8	9	10	11
<b>b) Fruits</b>										
Training and Pruning	2	14	0	17	13	0	13	30	0	30
Layout and Management of Orchards										
Cultivation of Fruit	1	12	0	12	0	0	0	12	0	12
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
<b>Others : a) Integrated nutrient management in Mango</b>	1	13	0	13	0	0	0	13	0	13
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others										
<b>d) Plantation crops</b>										
Production and Management technology	1	22	0	22	2	0	2	24	0	24
Processing and value addition										
<b>Others</b>										
a) Intercropping in coconut and arecanut										
b) Green manuring										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others										

1	2	3	4	5	6	7	8	9	10	11
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
<b>Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated nutrient management	3	41	0	41	5	0	5	46	0	46
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										
<b>Livestock Production and Management</b>										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										

1	2	3	4	5	6	7	8	9	10	11
Feed and Fodder technology	1	15	0	15	3	0	3	18	0	18
Production of quality animal products										
Others										
<b>Home Science/Women empowerment</b>										
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										
<b>Agril. Engineering</b>										
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										
<b>Plant Protection</b>										

1	2	3	4	5	6	7	8	9	10	11
Integrated Pest Management	4	50	0	58	22	0	22	80	0	80
Integrated Disease Management	3	50	0	50	17	0	17	67	0	67
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others										
<b>Fisheries</b>										
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										
<b>Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										



1	2	3	4	5	6	7	8	9	10	11
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 –FOCT										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others										
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>31</b>	<b>592</b>	<b>19</b>	<b>611</b>	<b>125</b>	<b>0</b>	<b>125</b>	<b>717</b>	<b>19</b>	<b>736</b>

**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	
1	2	3	4	5	6	7	8	9	10	11	
Nursery Management of Horticulture crops											
Training and pruning of orchards											
Protected cultivation of vegetable crops											
Commercial fruit production											
Integrated farming	1	16	11	27	0	1	1	16	12	38	
Seed production	1	12	12	24	0	0	0	12	12	24	
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											

1	2	3	4	5	6	7	8	9	10	11
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										
<b>Others.</b>										
I. Role of Rural Youth in Agriculture	1	43	32	75	12	6	18	55	38	93
II. Ex- trainees sammelan for FOCT trainees										
III. Soil and water conservation										
<b>TOTAL</b>	3	71	55	126	12	7	19	83	62	145

**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										
<b>TOTAL</b>										

### 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	1	36	1	37	7	0	7	43	1	44
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	1	46	0	46	2	0	2	48	0	48
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	01	19	-	19	05	-	05	24	-	24
Household food security										
<b>Any other</b>	1	19	0	19	9	0	9	28	0	28
a) Safe use of pesticide										
b) Technology transfer mechanism in Animal science										

c) Biofuel training to gram panchayath officials and elected members										
d) Management of Horticulture crops	1	28	0	28	6	1	7	34	1	35
e) Post harvest technologies	1	14	5	19	2	0	2	16	5	21
<b>Total</b>	<b>6</b>	<b>162</b>	<b>6</b>	<b>168</b>	<b>31</b>	<b>1</b>	<b>32</b>	<b>193</b>	<b>7</b>	<b>200</b>

#### 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										
<b>Any other a) Integrated farming system</b>										
<b>Total</b>										

## 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	2	3	4	5	6	7	8	9	10	11	12	
<b>1</b>	<b>Crop production and management</b>											
1.a.	Increasing production and productivity of crops											
1.b.	Commercial production of vegetables											
<b>2</b>	<b>Production and value addition</b>											
2.a.	Dryland horticulture	3	98	3	101	12	0	2	110	3	113	
2.b.	Ornamental plants											
2.c.	Spices crops											
<b>3.</b>	<b>Soil health and fertility management</b>											
<b>4</b>	<b>Production of Inputs at site</b>											
<b>5</b>	<b>Methods of protective cultivation</b>											
<b>6</b>	<b>Others :</b>											
	a) Kitchan and Terrace Gardening	4	17	364	381	36	21	57	53	385	438	
	b)Vegetables seed production	1	27	0	27	18	0	18	45	0	45	
<b>7</b>	<b>Post harvest technology and value addition</b>											
7.a.	Processing and value addition											
7.b.	Others											
<b>8</b>	<b>Farm machinery</b>											
8.a.	Farm machinery, tools and implements											
8.b.	Others											
<b>9.</b>	<b>Livestock and fisheries</b>											
<b>10</b>	<b>Livestock production and management</b>											
10.a.	Animal Nutrition Management	1	24	0	24	0	0	0	24	0	24	
10.b.	Animal Disease Management											
10.c	Fisheries Nutrition											
10.d	Fisheries Management											
10.e.	Others : Livestock based employment opportunity											
10.f	Profitable dairying through group action											
10.g	Integrated dairying and vermicompost											

1	2	3	4	5	6	7	8	9	10	11	12
<b>11.</b>	<b>Home Science</b>										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others										
<b>12</b>	<b>Agricultural Extension</b>										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others : 1.Sandalwood and other forestry technologies	1	82	20	102	8	4	12	10	24	114
	2. Protection of Plant Varieties and Farmers Right Act										
	<b>Total</b>	10	248	387	635	74	25	99	322	412	734

#### Details of sponsoring agencies involved

1. Department of Horticulture, Davanagere.
2. Institute of Wood Science and Technology, Bengaluru.
3. IAT, Davanagere
4. NFDB, Hyderabad.
5. Suvarna Agro Technology
6. Sujala-III, KWDP-II, Department of Horticulture, Davanagere
7. Department of Horticulture, Davanagere.
8. Bayer crop Science



## 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	2	3	4	5	6	7	8	9	10	11	12	
<b>1</b>	<b>Crop production and management</b>											
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											
<b>2</b>	<b>Post harvest technology and value addition</b>											
2.a.	Value addition											
2.b.	Others											
<b>3.</b>	<b>Livestock and fisheries</b>											
3.a.	Dairy farming											
3.b.	Composite fish culture	2	39	3	43	10	1	11	49	4	53	
3.c.	Sheep and goat rearing											
3.d.	Piggery											
3.e.	Poultry farming											
3.f.	Others											
<b>4.</b>	<b>Income generation activities</b>											
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.											

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	<b>Others:</b> Coconut climbing and plant protection										
<b>5</b>	<b>Agricultural Extension</b>										
5.a.	Capacity building and group dynamics										
5.b.	Others										
	<b>Grand Total</b>	<b>2</b>	<b>39</b>	<b>3</b>	<b>42</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>49</b>	<b>4</b>	<b>53</b>



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

Activities	No. of Activities	No. of Participants	
		No. of Farmers	No. Extension Personnel
Field Day	11	475	47
Animal health campaign	02	166 Animal treated	
Kisan Mela	01	50000	200
Exhibition	05	350270	664
Film Show	02	15	22
Method Demonstrations	32	919	119
Farmers Seminar	05	522	27
Farm Science Club (DDFA)	06	84	07
Group meetings			
Lectures delivered as resource persons	92	9986	1064
Newspaper coverage	85		
Radio talks	09		
TV talks	03		
Popular articles	08		
Scientific visit to farmers field	185	2196	376
Advisory over phone	574	574	
Farmers visit to KVK	2020	3767	52
Diagnostic visits	39	217	68
Exposure visits	02	53	09
Ex-trainees Sammelan			
Soil test campaigns	01	25	
Meeting/workshops with extension officials	08		838
Celebration of Days	08	1145	56
Kisan Ghosti	09	9000	50
KMAS	30	7000	



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

<b>Crop category</b>	<b>Name of the crop</b>	<b>Variety</b>	<b>Hybrid</b>	<b>Quantity of seed (qtl)</b>	<b>Value (Rs)</b>	<b>Number of farmers</b>
Cereals (crop wise)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables	Drumstick	KDM-1 (Bhagya)	-	1.575	40762.50	11
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Green manure						
Others						
<b>Total</b>				1.575	40762.50	11

**9.B. Production of planting materials by the KVKs**

<b>Crop category</b>	<b>Name of the crop</b>	<b>Variety</b>	<b>Hybrid</b>	<b>Number</b>	<b>Value (Rs.)</b>	<b>Number of farmers</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Commercial						
Vegetable seedlings	Drumstick	KDM-1 (Bhagya)	-	15,087	1,81,044.00	48
Fruits	Mango	Alphonso	-	1,176	43,800.00	07
Ornamental plants						
Medicinal and Aromatic						
Plantation	Arecanut	Channagiri Local	-	5,005	1,25,125.00	17
	Coconut	Arasikere tall	-	3,468	147779.999	21
Spices						
Tuber						

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Fodder slip	Guinea	BG-9	-	1100	550	02
Fodder cuttings	Napier	DHN-6	-	21750	350	15
Forest Species						
<b>Total</b>				<b>27586</b>	<b>4,98,648.99</b>	<b>79</b>

**9.C. Production of Bio-Products**

Bio Products	Name of the bio-product	Quantity (Kg)	Value (Rs.)	Number of farmers
Bio Fertilizers	Azolla	40	800	16
Bio-pesticide	--			
Bio-fungicide	<i>Trichoderma</i>	31	3720	05
Bio Agents	Eathworm	58.1	17430	23
Others	Vermicompost	19037	145949.829	185
	Banana Special	2562	448350	496
	Vegetable Special			
	Milk	9510.5	323357	302
	<i>Pseudomonas flurescence</i>			
<b>Total</b>		<b>31,238.6</b>	<b>939606.829</b>	<b>1027</b>

**9.D. Production of livestock materials**

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers
1	2	3	4	5
<b>Dairy animals</b>				
Cows				
Buffaloes				
Calves	HF x	04	10000.00	2

1	2	3	4	5
<b>Poultry</b>				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others				



<b>Piggery</b>				
Piglet				
Others				
<b>Fisheries</b>				
Fingerlings				
Ornamental fishes	Guppies, Mollies, Sword tails	3161	30058	66
<b>Total</b>		<b>3169</b>	<b>50058</b>	<b>70</b>

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

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

(A) KVK News Letter : Nil

(B) Literature developed/published

<b>Item</b>	<b>Title</b>	<b>Authors name</b>	<b>Number</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Research papers</b>	'Yield gap analysis of finger millet through Frontline Demonstration in Davanagee district of Karnataka' Published in 'International Journal of Research in Economics and Social Science' (IIRESS)	Mr. Raghuraja J. Dr. Devaraja T.N. Mr. Mallikarjuna B.O. Mr. Prasannakumara N.	--
	'Plant growth promoting potential and phylogenetic characteristics of a lichenized nitrogen fixing bacterium, Enterobactercloacae' in Journal of Basic Microbiology.	Chidanandamurthy Thippeswamy Swamy Devaraja Gayathri <b>Thimmalapura Neelakantaiah</b> <b>Devaraja</b> MandarBandekar Stecy Elvira D'souza Ram Murti Meena and Nagappa Ramaiah	
	'Role of Cyanolichens in biological Nitrogen fixation' in Anege wandten Biologie Forschung	Devaraja Gayathri Swamy C T <b>Devaraja T N</b>	

<b>Technical reports</b>			--
<b>News letters</b>			
<b>Popular articles</b>	Mostsopaya-Sollegalige apaya-In Negila Midtha, UAHS, Shivamogga	Dr. Devaraja T.N.	--
	Anthara Belegalige thogari beledhu labha padedhu raitha- in Siri Sambrudhi, BIEF, Tiptur.	Mr. Mallikarjuna B.O. Dr. Devaraja T.N.	--
	Nivrutha Bank Adhikariya Krishiya Kushi-in Negila Miditha, UAHS, Shivamogga	Mr. Basavanagowda M.G. Dr. Devaraja T.N.	--
	'Agribusiness for sustainable farm income'-Paper presented in International Conference on 'Advances in collaborative Research' organized by University of Mysore, Mysore.	Mr. Raghuraja J. Dr. Devaraja T.N.	--
	'Mulching wins Bonus crops in Dryland Farming' and 'Redgram (BRG-2) medium duration and drought tolerant suitable for intercropping in Hybrid Maize under rainfed'. Paper presented in National Workshop on 'Mainstreaming Climate Change and Adoption in Agriculture and Allied Sector' by MANAGE, Hyderabad.	Mr. Mallikarjuna B.O. Dr. Devaraja T.N.	--
	Successful training and demonstration to promote mechanization in Rice transplanting - In Social Science Abstracts, Peoples' Health and quality of Life in India, organized by Indian Academy of Social Sciences and University of Mysore.	Mr. Mallikarjuna B.O. Dr. Devaraja T.N.	-
	Assesment of various methods of urea application in Paddy with our emphasis on Nitrogen use efficiency In Social Science Abstracts, Peoples' Health and quality of Life in India, organized by Indian Academy of Social Sciences and University of Mysore.	Mr. Sannagoudra H.M. Mr. Mallikarjuna B.O. Dr. Devaraja T.N.	-
	Assessment of micronutrient application in Banana to increases production. In Social Science Abstracts, Peoples' Health and quality of Life in India, organized by Indian Academy of Social Sciences and University of Mysore.	Mr. Basavanagouda M.G. Dr. Devaraja T.N.	-
	Rain water harvesting structures-Conserving the soil and moisture in climatically vullorable village. In XIII Agricultural Science Cogress-2017 organized by UAS, Bengaluru and NAAS, New Delhi.	Dr. Devaraja T.N. Mr. Mallikarjuna B.O. Dr. Jayadevappa G.K.	-
Improved Crop production Technologies to tackle the Climatic Uulnarability	Dr. Devaraja T.N.	-	

	in Siddanur, NICRA village. In XIII Agricultural Science Congress-2017 organized by UAS, Bengaluru and NAAS, New Delhi.	Mr. Mallikarjuna B.O. Dr. Jayadevappa G.K.	
	Mitigating Climatic varieties in animal Husbandary practices at NICRA village Siddanuru. In XIII Agricultural Science Congress-2017 organized by UAS, Bengaluru and NAAS, New Delhi.	Dr. Jayadevappa G.K. Dr. Devaraja T.N. Mr. Mallikarjuna B.O.	-
	Adikeyalli Hidimundige Nvenathe Mathu Nirvahane-Jantha Vani.	Mr. Basavanagowda M.G. Mr. Mallikarjuna B.O.	-
	Assesment of performance of different groundnut varieties in Davangere district of Karnataka.- In Abstracts 2 <sup>nd</sup> KVK symposium, organized by TNAU and ATARI	Mr. Mallikarjuna B.O. Dr. Devaraja T.N.	-
	Effect of feeding Azolla on the performance of Dairy Animals In Abstracts 2 <sup>nd</sup> KVK symposium, organized by TNAU and ATARI	Dr. Jayadevappa G.K. Dr. Devaraja T.N.	-
	Assessment of different methods of planting in Banana var: Grandnaine in Davanagere district of Karnataka	Mr. Basavanagowda M.G Dr. Devaraja T.N.	-
	Impact of KVK technologies in Agriculture through up-Scaling in Davanagere district of Karnataka. In Abstracts 2 <sup>nd</sup> KVK symposium, organized by TNAU and ATARI	Mr. Raghuraja J. Dr. Devaraja T.N. Mr. Mallikarjuna B.O. Mr. Prasannakumara N. Mr. Sannagoudra H.M.	-
	Dharmikaatheya Durbalake Deshada Vibajaneya Mula- in Janathavani	Dr. Devaraja T.N.	-
	Samayakke thakka Sabhe utada jothe uppirakay' –in Janathavani	Mr. Mallikarjuna B.O. Dr. Devaraja T.N.	-
	Onabhuviyallu Kirudhanyagala Siribhagya: Baradallu raithara Badhukige vara.		

	Rostra Prashasti Vijetha Raitha Sri Anjaneya- in Krishi Munnede, UAS (Dharwad).	Mr. Raghuraja J. Dr. Devaraja T.N.	-
	Havamana and Viparithyadalli Adike Thotagala Nirvahane in Negila Miditha, UAHS. Shivamogga	Mr. Basavanagowda M.G Dr. Devaraja T.N.	-
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Extension literature</b>	Training Manual on Fisheires	Dr Devaraja T.N.	500
	Conversion of Kitchen waste to compost	Dr. Shanta Bhat, Dr.G.K Jayadevappa & Dr. Devaraja T.N.	1000
<b>Radio Talk</b>	Diseases of Dairy Animals during rainy season and their insurance coverage-AIR, Badravati	Dr Jayadevappa G.K.	--
	Drough Management Strategies, AIR-Badravati	Mr Mallikarjuna B.O.	--
	Importance of minor millet-AIR, Chitradurga	Mr. Vijayakumara S.B.	--
	Improved parduction technology in pulses-AIR, Chitradurga	Mr Mallikarjuna B.O.	--
	Scientific management of Dairy animals during summer-AIR, Chitradurga	Dr Jayadevappa G.K.	--
	Role of Fisheries in IFS and Fish as nutritive food –AIR, Chitradurga	Dr Devaraja T.N.	--
	Integrated Nutreint Management –AIR, Chitradurga	Mr Sannagoudra H.M.	--
	Production Technolgoy in Pepper-AIR, Chitradurga	Mr Basavanagowda M.G.	--
	Integrated Pest and Disease Management in Redgram-AIR, Chitradurga	Mr. Prasannakuamra N.P.	--
	• Fodder management for livestock during scarcity period. (AIR-Bhadravathi, 6-50 PM.)	Dr. Jayadevappa G.K.	
	• Management of Dairy Animals during summer period (AIR-Bhadravathi)	Dr. Jayadevappa G.K.	
<b>TV Programmes</b>	Integrated Crop Management in Sunflower under rainfed-E-TV	Mr Mallikarjuna B.O.	
	Crop Management Practices during Dryspell in maize-E-TV	Mr Mallikarjuna B.O.	
	Benefits of Neem coated urea-E-TV	Mr Sannagoudra H.M.	
	Terace Gardenning-DD, Chandana	Mr Basavanagowda M.G.	

#### 10. B. Details of Electronic Media Produced

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

**10.C. Success Story:** NIL

**10. D. Details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year:**

- a) **Avenue planting of Drumstick plants:** In KVK farm has attracted many farmers and citizens alike. This earned a substantial income to Revolving Fund of KVK.
- b) **Saturday Organic Bazaar (Saavayava Shanivara Santhe):** Weekly sandy held at TKVK on every Saturday helped organic farmers and the enthusiastic consumers of organic produce as it is made available next door.
- c) **Kasa Rasa Abhiyana:** Campagin started for urban waste bio degradation in colloboratin with women organization in Davanagere.
- d) **Orientation of PU students:** Conducted orientation for 2<sup>nd</sup> year PU pass students to motivate them to persue agriculture as education. (200 students attended the orientation programme among them 38 students got admission in UAS)

**10. E. Details of indigenous technology practiced by the farmer in the KVK operational area which can be considered for technology:**

**An Ecofriendly Indigenous Innovative Bird Scare Device – Developed by Sri M.B. Ravi, Siddanuru village, Davanagere tq.**

It is an ecofriendly device. It does not harm the birds but scare them away from the crop field. Otherwise, farmers are advised to use bird nets which catch the birds and kill them. Killing can easily be avoided by adopting this simple sound making device. It can even scare squirrels, monkeys and pigs. However, this needs to further verified. Appears to be a new type looking at its cost and efficiency. This divce can be used for all vegetables and fruits crops etc and price fixed at Rs. 2000/- per divce.

**10.F. Indicate the specific training need analysis tools/methodology followed :** NIL

**10.G. Field activities**

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

**10. H. Activities of Soil and Water Testing Laboratory**

**Status of establishment of Lab** : Established

1. Year of establishment : 2011 (April)

2. List of equipments purchased with amount

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

details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)	Soil Health Card Issued
<b>Soil Samples</b>	4770	3870	2298	441281	1254
<b>Water Samples</b>	3512	2543	2276	165850	
<b>Plant samples</b>					
<b>Manure samples</b>	5	3	2	500	
<b>Total</b>	<b>8282</b>	<b>6413</b>	<b>4576</b>	<b>607631</b>	1254

- There are 810 villages in the district. Samples from adjacent district villages is also included. The number of villages shown is including the repetition of same villages.

**Details of samples analyzed during the 2016-17:**

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)	Soil Health Card Issued
Soil Samples	1254	1024	786	123300	1254
Water Samples	1140	905	719	57000	
Plant samples					
Manure samples	-				

- There are 810 villages in the district. Samples from adjacent district villages is also included. The number of villages shown is including the repetition of same villages.

#### 10.I. Technology Week celebration during 2016-17 : Yes

**Period of observing Technology Week** : From 23-12-2016 to 26-12-2016

**Total number of farmers participated** : 208

**Total number of agencies involved** : 04 (Department of Agriculture, Horticulture, AH & VS, Krishika Samaja).

**Number of demonstrations visited by the farmers:** 15

#### Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	1	114	
Lectures organized	2	94	Terace garden and Kitchen garden
Exhibition	1	114	
Film show	3	208	
Fair			
Farm Visit	3	208	Instructional farm technologies
Diagnostic Practical			
Supply of Literature (No.)	2	176	Kitchen and terrace garden and Development Department schemes book
Supply of Seed (q)			
Supply of Planting materials (No.)			



Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week			
Other	-	-	-

**10. J. Interventions on drought mitigation (if the KVK included in this special programme) :** Not included.

**A. Introduction of alternate crops/varieties:**

State	Crops/cultivars	Area (ha)	Number of beneficiaries
-	-	-	-

**B. Major area coverage under alternate crops/varieties**

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses (under NFSM)		
Cereals		
Vegetable crops		
Tuber crops		
<b>Total</b>		

**C. Farmers-scientists interaction on livestock management**

State	Livestock components	Number of interactions	No. of participants
Karnataka			
<b>Total</b>			

**D. Animal health camps organized**

State	Number of camps	No. of animals	No. of farmers
Karnataka			
<b>Total</b>			

**E. Seed distribution in drought hit states : NIL**

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
--	--	--	--	--
<b>Total</b>	--	--	--	--

**F. Large scale adoption of resource conservation technologies : NIL**

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

**G. Awareness campaign**

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
Karnataka												
<b>Total</b>												

**PART XI. IMPACT**

**11.A. Impact of KVK activities: Nil****11.B. Cases of large scale adoption: Banana Special:****1. Situation:**

Banana being an 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 identified 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, Bengaluru. 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, Bengaluru publications acknowledged the significance of Banana special. Repeated users and new users were the indicators of product's success.

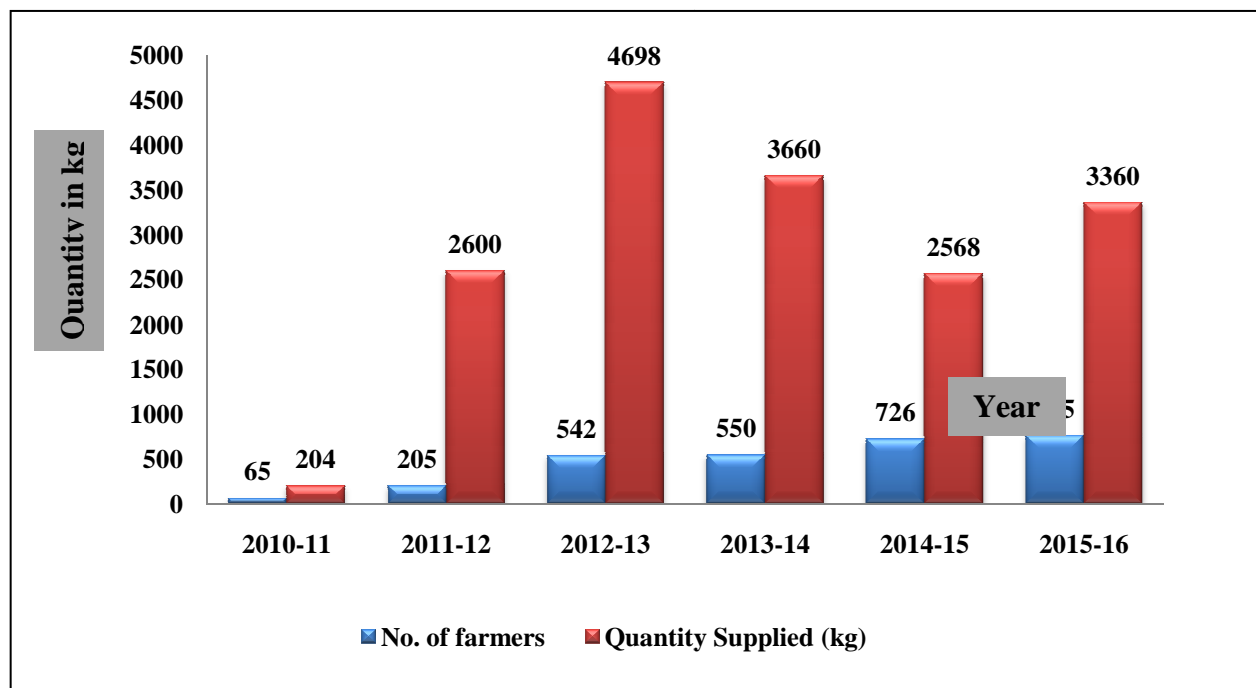
**3. Out Put:**

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<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup>, 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.

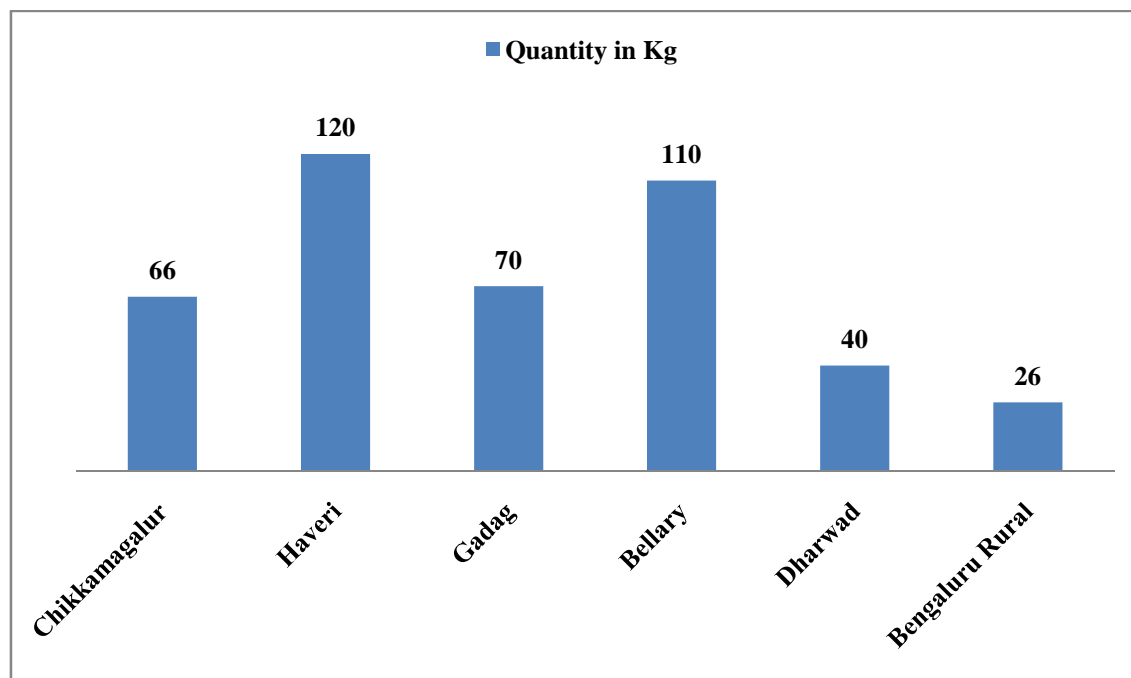
**Table 1: Details of Frontline Demonstrations on Banana special.**

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
<b>Total</b>		<b>63</b>	<b>17.4</b>						

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 6<sup>th</sup> 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.



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 crocking.
- **Higher Total soluble sugar ( TSS) content in the fruits:** Magnesium is also one of the component in Banana special and it is also a main component in chlorophyll. The increased photosynthesis in plants by providing Mg ultimately leads to higher total soluble sugar in fruits.

### 5. Impact:

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

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

### Reference:

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

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

**PART XII - LINKAGES****12.A. Functional linkage with different organizations**

<b>Name of organization</b>	<b>Nature of linkage</b>
Natioanl Innovation Foundation –Inida, Ahmadabad	State level Innovative Farmers Conference
Institute of wood science and Technolgoy, Bengaluru	Trainings
Institute of Agro forestry Farmers and Technocretes, Bengaluru	Trainings
National Fishereis Development Baord, Hyderabad	Vocational Trainings
UAHS, Shivamogga	Technologies, trainings
IIHR, Bengaluru	Technologies
UAS (Bengaluru), UAS (Dharwad), UAS (Raichur), KUAFSU (B), UHS (Bagalkot)	Technologies
Department of Agriculture, Horticulture, AH & VS,	Trainings
Dept of Animal Husbandry & Veterinary Science,Davanagere	Conducting Animal health Camps and Extension Functionaries Training programmes
Techno Serve co,Davanagere	Conucting animal Health Camps ,Training programmes and Method Demonstrations
Virbac Pharmaceuticals,Pune	Coducting Technical Seminars and Animal Health Camps
Department of Horticulture	Diagostic field visits, Trainings
KWDP-II,Sujala III, Department of Horticulture	Diagostic field visits, Trainings



**12.B. List Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies**

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
NICRA	Demonstrations, Training, NRM works, Exposure visits and Climate Resilient Technologies	17-01-2011	ICAR	4,08,488-00
Biofuel Information and Demonstration Centre	Training, Awareness campaign Demonstration, Exhibitions and Research	22-3-2011	Karnataka State Biofuel Development Board, GoK	6,00,000-00
Sujala –III, KWDP-II	Institutional Training	Janury 2017	Department of Horticulture	80,000-00
Kitchen and Terrace garden	Training	Janury 2017	Department of Horticulture	60,000-00

**12. C. Details of linkage with ATMA**

a) Is ATMA implemented in your district (Yes/ No) : Yes

Visited villages and collected basic data for preparation of SREP

**Coordination activities between KVK and ATMA during 2016-17**

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	-			
02	Research projects	-			
03	Training programmes	-			
04	Demonstrations	-			
05	Extension Programmes	-			
06	Publications	-			
07	Other Activities (Pl. specify)				

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
01	Training	Resource person	--	--	--

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Trainings	2 vocational trainings on Fisheries	--	--	--

**12.F. Details of linkage with RKVY : NIL**

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

**12. G Kisan Mobile Advisory Services**

Month	Message Type	No. of farmers covered	Crop	Livestock	Weather	Marketing	Awareness	Other Enterprise	Marketing	Total
April	Text Message	-					-			-
May	Text Message	80					01			01
June	Text Message	211					01			01
July	Text Message	1993					03			03
October	Text Message	6993					01			01
August	Text Message	6993					03			09
September	Text Message	7001	04				02	01	01	04
November	Text Message	7062	02				03			03
December	Text Message	6985					-	02		02
January	Text Message	6985					03			03
February	Text Message	6944					02			02
March		<b>6995</b>					01			01
	<b>Total</b>		<b>06</b>				<b>20</b>	<b>03</b>	<b>01</b>	<b>30</b>

❖ A total of 7052 farmers registered for KMAS. Depending on the message category, farmers are receiving the messages.

**PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK****13.A. Performance of demonstration units (other than instructional farm)**

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty. (kg)	Cost of inputs	Gross income	
1.	Banana Special	2011-12	--	-	Micronutrient Mixture	2562	71636-00	449750-00	
2.	Horticulture Nursery	2009-10	0.1	Arsikere tall	Coconut	3468	227968-00	525961-00	
				Local	Arecanut	5005			
				KDM-1	Drumstick	15087			
				Alphanso	Mango	1176			

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
<b>Cereals</b>									
Ragi (Finger millet)	17-06-2016	14-11-2016	0.75	GPU-28	Seeds and Straw	9.65	62,810/-	75,050/-	
Maize	15-10-2016	15-10-2016	0.75	Commerical, MLVT	Seeds and Straw	31.27	32,099/-	48,455/-	
Minar Millets	13-07-2016	14-11-2016	0.5	Local	Seeds and Straw	3.95	26,700/-	28,700	
<b>Pulses</b>									
<b>Oilseeds</b>									
<b>Fibers</b>									
<b>Spices &amp; Plantation crops</b>									

<b>Green manure crops</b>									
Sunhemp	16-10-2016	04-1-2017	0.5	Local	Seeds and Straw	1.25	2500/-	6250/-	
Dhiancha	20-07-2016			Local					Incorporated to soil to improve soil fertility.
Velvet beans	06-07-2016			Local					Incorporated to soil to improve soil fertility.
<b>Fruits</b>									
Mango									
Sapota									
<b>Vegetables</b>									
Brinjal	08-06-2016	11-11-2016	2 guntas	Commercial	Vegetables	2	1900/-	2,500/-	
Bhendi	06-06-2016	08-10-2016	2 guntas	Commercial	Pods	30 kg	1600/-	1,850/-	
Bottlegaurd									
Cucumber									
<b>Plantation crops</b>									
Arecanut									
Tamarind									

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1					

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Crossbred Cow Dairy	HF X	Milk	9510.5 l	324000.00	3,37,770.00	
2	Varietal Fodder plots demo unit	DHN-6, Guinea Grass (BG-9) Co-3 Napier	Root slips	22350 No.	-	10,900.00	
3	Azolla Demo Unit	<i>Azolla pinnata</i>	Azolla plant	36.0 kg	-	720.00	
4	Vermiculture and vermicompost demo unit		Compost	8477 kg	42000.00	84,770.00	
		<i>Eudrilus Sp.</i>	Earthworms	57.1 kg	-	17,130.00	
5	Ornamental Fish Production Unit	Guppies, Moilies, Sword tails	Ornamental fishes	3161	100.00	20,058.00	

**13. E. Utilization of hostel facilities**

Accommodation available (No. of beds): 35

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall
April-2015	-	-	--
May-2015	75	02	--
June-2015	12	01	--
July-2015	04	78	--
August-2015	31	02	--
September-2015	01	89	--
October-2015	178	09	--

November-2015	42	22	--
December-2015	128	04	--
January-2016	165	11	--
February-2016	-	-	--
March-2016	35	06	--
<b>Total</b>	<b>671</b>	<b>224</b>	--

### 13. F. Database management

Sl. No	Database target	Database created
1	<ul style="list-style-type: none"> <li>Data base on Soil test, Water test, Radio talk, TV talk and Guest lecture.</li> </ul>	<ul style="list-style-type: none"> <li>Updating is continues with these database.</li> </ul>
2	<ul style="list-style-type: none"> <li>Database on training, FLD, OFT and others.</li> </ul>	<ul style="list-style-type: none"> <li>Updating of data is ongoing</li> </ul>

### 13.G. Details on Rain Water Harvesting Structure and micro-irrigation system : NIL

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

### 13.H. Farmers Field School :

<b>CROP</b>	<b>Bengal gram (Chickpea)</b>
Technology	Integrated Crop Management in Bengalgram
Area	1 acre
Collaborator	Mr. Shivalingagowda
Participants	25
Facilitator	SMS (Agronomy, Soil Science, Plant Protection, SS &H
Village	Myduru, Harapnahalli Taluk

Sl. No.	DATE	Activities
1	25-10-2016	Land preparation and seed treatment with Biofertilisers for bengalgram
2	2-12-2016	Integrated pest and disease management
3	16-12-2016	Integrated Nutreint – Importance of of pulse mangic in improving the yield
4	19-01-2017	Field Day
5	06-02-2017	Post harvest technology and sharing the experince of Participants .

Name of the technology demonstrated	Variety	Farming situation	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			De mo	Chec k		Gross Cost	Gross Return	Net Return	BCR	Gros s Cost	Gross Return	Net Return	BCR
Integrated Crop Management	JAKI - 9218	Rainfed with Protective irrigation	11.3	10.1	10.61	25400	66670	41270	2.62	24700	59590	34890	2.41

### Other works:

## Farm Trials

### Crop:Rice

1. Title: Performance of Paddy Varieties KKP-5 v/s JGL-1798
2. SMS Involved: Mr.Mallikarjuna B.O SMS (Agronomy)
3. Name of Village: Shygale and Kodihalli,Davanagere taluk
4. No. of Trials:2

Colloboration :UAHS,Shivamogga

Particulars	JGL-1798	KKP-5
Plant Height	92.1 cm	101.3 cm
50 % flowering	97 days	101 days
Duration	135 days	137 days
No .of panicle /hill	15.5	17.1

Crop	Farming situation	No. of trials	Variety	Percent increase(%)	Yield q/ha	GC	GR	NR	B:C
Paddy	Irrigated	02	KKP-5	21.3	62.50	52,000	1,18,750	66,750	2.28
			JGL-1798		51.50	52,000	1,00,425	48,425	1.93

### Crop: Hybrid Maize

1. Title: PERFORMANCE OF Maize Hybrids MAH-14-5 v/s NAH-1137
2. SMS Involved: Mr.Mallikarjuna B.O SMS (Agronomy)
3. Name of Village : Siddanuru
4. Name of trials: 2

Collaboration : UAHS,Shivamogga

Particulars	MAH-14-5	NAH-1137
Plant Height cm	200.7	199.2
No. of rows/cob	14.5	14.1
Duration	120	120



Crop	Farming situation	No. of trials	Hybrid	Yield q/ha	GC	GR	NR	B:C
Maize	Rainfed	02	MAH-14-5	63.50	47,500	82,550	35,050	1.73
			NAH-1137	59.00	47,500	76,700	29,200	1.61

### Crop: Finger millet

1. Title: PERFORMANCE OF High yielding Finger millet variety ML-322
2. SMS Involved: Mr.Mallikarjuna B.O SMS (Agronomy)
3. Name of Village : Myduru
4. Name of trials: 2

Collaboration : UAS, Bangalore

Particulars	ML-322
<b>Plant height (cm)</b>	<b>116.3</b>
<b>No. of tillers/plant</b>	<b>5.7</b>
<b>No. of fingers/head</b>	<b>7.4</b>
<b>1000 seed weight (g)</b>	<b>25.2</b>

Crop	Farming situation	No. of trials	Hybrid	Yield q/ha		GC	GR	NR	B:C
				Grain	Fodder				
Finger millet	Rainfed	03	ML-322	26.5	43.9	32800	80225	47425	2.44

## 13.I. a) Integrated Farming System in Dryland Horticulture

Name of the farmer, Land holding and Annual Income (Rs) 2016-17	Existing crop / enterprises	KVK intervention 2016-17	
		Crops/ Enterprises	Gross Income (Rs.)
1	2	3	4
Sri Renukarya M K U. Kallahalli, Harpanahalli  Area : 6 ha	<u>Coconut (paired and pentagonal planting),</u> Arecanut, Banana, Sapota, Mango, Fodder, Dairy, Vermicompost unit, Farm ponds	Coconut Arecanut Banana Sapota Mango Dairy Sheep unit Poultry Fishery Agro forestry	2,40,000 2,80,000 2,64,000 80,000 80,000 1,44,000 22,550 12,250 6,000 40,000
		<b>Total</b>	<b>11,68,750</b>
Sri Omkarappa S. Mallapura Honnali tq.  Area-3.5 ha	Maize, Ragi, Groundnut, Mango, Sapota, Coconut, Betelvine, Beans, Banana, Vermicompost and Guava, Moosambi	Maize Ragi Groundnut Betelvine Beans Sapota Mango Banana Guava	5,000-00 10,000-00 8,000-00 10,000-00 5,000-00 8,000-00 15,000-00 65,000-00 2,000-00
		<b>Total</b>	<b>1,28,000-00</b>
Sri Dyamanna Haluvorthy  Area 06 ha	Maize, Cotton, Rose, Dairy, Arecanut, Poultry, Banana, Chilli	Magize Chilli Arecanut Poultry Dairy	75,000-00 25,000-00 2,50,000-00 2,50,000-00 2,00,000-00
		<b>Total</b>	<b>8,00,000-00</b>

Sri. Arun kumar G C, Bilichodu, Jagaluru taluk  Area-10 ha	Dairy,Coconut and fodder , Arecanut and pepper, Tamarind, Maize,Cotton, Finger millet	Dairy Coconut and fodder Arecanut and pepper Tamarind Maize Cotton Finger millet	3,00,000.00 90,000.00 2,10,000.00 35,000.00 12,500.00 25,000.00 57,000.00
		<b>Total</b>	<b>7,29,500.00</b>
Sri. Shankara Murthy N.S. Lingadahalli Channagiri Taluk Davanagere Distict  Area-3.2 ha	Maize, Finger Millet, Arecanut, Coconut, Arecanut nursery Hebbavu Pepper	Arecanut Coconut Arecanut Nusery Maize Finger Millet Pepper Pepper seedlings	2,15,000-00 65,000-00 85,000-00 18,000-00 7,000-00 12,000-00 6,000-00
		<b>Total</b>	<b>4,02,600-00</b>
Sri Ramanjaneya Salakatte Camp Sathyanarayanapura Harihara taluk Davanagere District  Area 5 ha	Paddy, Arecanut, Coconut, Cocoa, Vermicompost, Farm Ponds, Dairy	Paddy Arecanut Coconut + Cocoa Dairy	2,19,000-00 6,95,000-00 5,88,000-00 -
			<b>15,02,000-00</b>

**13. I. b) Innovative Programme: (On-going)****Davanagere Dairy Farmers Association (DDFA):**

- Monthly meeting to discuss the issues and decide about the viable solution to each problem.
- Technical seminar will be organized in the subject of farmers interest.
- Pharmaceutical Co., Feed Co., Dairy industry representatives will also participate and give knowledge on their products.
- Currently, DDFA is providing technical inputs to farmers and conducting seminars to develop their skills.
- Soft loan for the procurement of milking machine and cryo can.
- Outcome from last year's work:
  - Number of animals inseminated with superior germplasm ( 2 units) – 3025
  - Number of animals conceived – > 1300
  - Number of monthly technical meetings – 05
  - Advisory services provided – 12
  - Supply of good quality fodder seeds/slips (Lucerne, Nutrifeed, DHN-6, Napier X, Sugargraze, Sesbenia) – 102 farmers
  - Supply of mineral mixture and vitamine tonic-785 farmers.
  - Improved milk production: From 5–6 litres/day to 10–12 litres/day
  - Net income/cow/month: From Rs. 400-500 to Rs. 1000-1200

**PART XIV - FINANCIAL PERFORMANCE****14.A. Details of KVK Bank accounts**

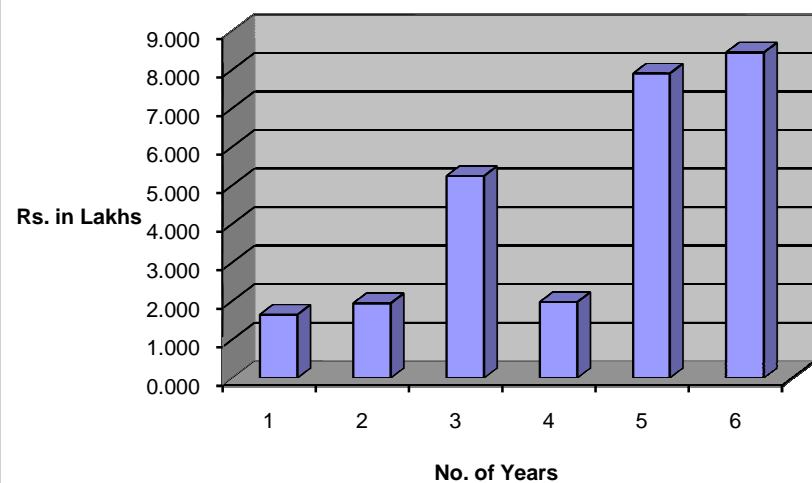
<b>Bank account</b>	<b>Name of the bank</b>	<b>Location</b>	<b>Branch code</b>	<b>Account Name</b>	<b>Account Number</b>	<b>MICR Number</b>	<b>IFSC Number</b>
With KVK	State Bank of India	PJ Extension DAVANAGERE 577 002	5624	Taralabalu Krishi Vigyan Kendra <b>(Main Grant Account)</b>	30166599498	577002002	SBIN0005624
	Canara Bank	Vidyanagar DAVANAGERE 577 004	1813	Taralabalu Krishi Vigyan Kendra <b>(Revolving Fund)</b>	1813101010146	577015007	CNRB0001813

<b>14. B. Utilization of KVK Funds During the Year 2016-17 (Rs. In Lakhs)</b>				
<b>Sl. No.</b>	<b>Particulars</b>	<b>Sanctioned (RE)</b>	<b>Released</b>	<b>Expenditure</b>
<b>A.</b>	<b>RECURRING ITEMS :</b>	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
1	Pay & Allowance	115.400	114.973	115.833
2	Travelling Allowance	1.250	1.000	0.978
3	Other Contingencies :	11.900	11.490	11.450
a)	Office Stationery, Telephone, etc.	2.750	2.750	2.733
b)	POL & Repairs	2.000	2.000	1.999
c)	Meals/Refreshment for Trainees	0.500	0.500	0.500
d)	Demon. & Teaching Materials	0.700	0.700	0.700
e)	Front Line Demonstrations	2.620	2.430	2.428
f)	On Farm Testing	0.480	0.260	0.253
g)	Integrated Farming System (IFS)	0.300	0.300	0.299
h)	Training To Extension Functionaries	0.250	0.250	0.249
i)	Extension Activities	0.300	0.300	0.292
j)	Farmers Field School (FFS)	0.300	0.300	0.300
k)	SWT & Issue of Soil Health Cards	0.500	0.500	0.499
l)	Display Boards	0.100	0.100	0.099
m)	Mtc of Building	1.000	1.000	1.000
n)	Mtc of Library	0.100	0.100	0.099
	<b>Total - 'A'</b>	<b>128.550</b>	<b>127.463</b>	<b>128.261</b>
<b>B.</b>	<b>NON RECURRING ITEMS :</b>			
1	Equipments & Furniture			
a)	Office Automation	3.000	3.000	3.000
b)	Furniture & Fixtures	1.000	1.000	0.999
2	Works			
3	Vehicles (Replacement)	8.000	8.000	7.999
4	Establishment of Library			
	<b>Total - 'B'</b>	<b>12.000</b>	<b>12.000</b>	<b>11.998</b>
<b>C.</b>	<b>REVOLVING FUND</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Total ( A + B + C)</b>	<b>140.550</b>	<b>139.463</b>	<b>140.259</b>

**14.C. Status of Revolving Fund (Rs. In Lakh) for Five Years**

(Sanctioned : Rs.1 Lakh During 2004-05, Seed Money Returned : Rs.1 Lakh)

Year	Opening Balance	Receipts	Payments	Closing Balance
Rs. In Lakhs				
April 11 To Mar-12	0.695	41.291	40.339	1.647
April 12 To Mar-13	1.647	33.193	32.898	1.942
April 13 To Mar-14	1.942	29.733	26.432	5.243
April 14 To Mar-15	5.243	40.308	43.578	1.973
April 15 To Mar-16	1.973	39.112	33.18	7.905
April 16 To Mar-17	7.905	42.129	41.585	8.449

**Growth Rate of Rev.Fund**

**15. Details of HRD activities attended by KVK staff during 2016-17**

Sl. No.	Staff Name	Designation	Discipline	Training Title	Institute Address	Start Date	End Date	Amount (Rs)	Remarks
	1	2	3	4	5	6	7	8	9
1	Dr. Devaraja T.N.	Senior Scientist-Cum-Head	Fisheries	PGDAEM	MANAGE, Hyderabad	1-1-2016	31-12-2016	-	-
2	Mr. Basavanagouda M.G.	SMS	Horticulture	PGDAEM	MANAGE, Hyderabad	1-1-2016	31-12-2016	-	-
3	Mr. Raghuraja J.	SMS	Agri. Extension	PGDAEM	MANAGE, Hyderabad	1-1-2016	31-12-2016	-	-
4	Dr. Devaraja T.N.	Senior Scientist-Cum-Head	National orientation workshop for Fishries Experts	NFDB	Hyderabad	16-6-2016	17-6-2016		
5	Mr. Raghuraja J.	SMS	Agri. Extension	Designing Impact Evaluation for Agricultural Technologies	ICAR-NRRI, Cuttack	1-8-2016	10-8-2016	50-00	

**16. Any other important and relevant information which has not been reflected above:**

- **Krishi Vigyan Kendra promoted farmers received the following National Awards:**
  - Sri Shankara Murthy N.S., Lingadahalli village, Channagiri taluk received Jagjivan Ram Abhinav Kisan Puraskar Award by ICAR-New Delhi.
  - Sri Anjayneya A.N., Kumbalur Village, Harihara taluk received PPV & FRA Plant Genome Saviour Reward, New Delhi along with cash prize of Rs. 1.5 Lakh.
- Participated in 2 day 2<sup>nd</sup> 'Krishi Vigyan Kendra Symposium' held at TNAU, Coimbatore and presented 3 poster and 1 oral papers and won Best Poster Award to Sri. Basavanagouda M.G. et.al.



- Completed DAESI Diploma course for 4 input dealers of Harihara taluk in collaboration with SAMETI South, MANAGE, Hyderabad and Department of Agriculture, Davanagere.
- Celebrated following special days:
  - ‘National Fish Farmers Day’ in collaboration with Department of Fisheries, Davanagere.
  - ‘World Fisheries Day’ in collaboration with Department of Fisheries, Davanagere.
  - International Farmers Day’ in collaboration with Department of Agriculture and Krishik Samaja, Davanagere.
  - ‘National Science Day’ in collaboration with Government First Grade College, Davanagere.
  - ‘World Environment Day’ in collaboration with ‘Biofuel Information and Demonstration Centre, Kasa Rasa Abhiyana and Saptagiri School, Davanagere
  
  - ‘World Food Day’
  - ‘World Diabetes Day’ in collaboration with ‘Traditional Medicine Academy’, Karnataka.
  - ‘World Soil Health Day’ in collaboration with Department of Agriculture and IAT, Davanagere.
- Organized 6 day Krishi Mela at Sirigere, chitradurga district from 19-09-2017 to 24-09-2017 in collaboration with Development Departments and Agro input agencies.
- Participated in the ‘Flower and Fruit Show’ organized by Department of Horticulture from 15-18 April 2016 and 18-20 February 2017.
- Participated in the ‘Krishi Mela’ organized by UAHS, Shivamogga from 21-24 October 2016.
- Organized workshop on ‘Agroforestry’ in collaboration with Institute of Agro-forestry Farmers and Technocrats, Bengaluru.
- Organized training on ‘Sandalwood and other Forestry Technologies’ in collaboration with Institute of Wood Science and Technology, Bengaluru.
- Organized 2 day ‘State Level Innovative Farmers Conference’ sponsored by National Innovation Foundation-India. 65 farmers from 18 district presented their innovation.
- Organized awareness programme on ‘Protection of Plant Varieties and Farmers Right Act’ sponsored by PPV & FR Authority, New Delhi.
- PMFBY inauguration was organized in Krishi Vigyan Kendra and union minister of State Sri G.M. Siddeshwara inaugurated the programme. Krishi Mela was organized on this occasion in collaboration with Development Departments and input agencies.

The followed up discussion on the merits and demerits of the scheme discussed in presence of HH Dr. Shivamurthy Shivacharya Mahaswamiji at Sirigere with all the Stake Holders, viz; Bank officials, Farmer leaders, Politicians, Bureacrats.

- Organized 2 orientation programmes for 2<sup>nd</sup> PUC passed students for admission to Agricultural Universities (259 students participated).
- Organized 2 (5 days) training programmes on ‘Inland Fish Farming’ sponsored by National Fisheries Development Board, Hyderabad (56 farmers participated).
- Hosted 1 year Diploma in Traditional medicine for 40 candidates in collaboration with Paramparika Vydyia Parishath, Karnataka.

**Biofuel Information and Demonstration Centre:**

- Conducted 14 training programme to 494 participants on Bioenergy to farmers, farm women and rural youths.
- Conducted 11 Awareness Programme to 1019 High School and college students, farmers, farmwomen, Rural folk and urban people through demonstrations, discussion and Jathas.
- Conducted 7 'Bioenergy Exhibition' for more than 25,000 participants at Horticulture exhibition conducted by Department of Horticulture, at Saphageri school, at Krishi Mela in eve of Taralabalu Hunnime, Sirigere, Chitradurga district, at University of Agricultural and Horticultural Sciences, Shimoga in eve Krishi Mela.
- Celebrated 'World Environmental Day' on 11<sup>th</sup> June 2016 in collaboration with Saphageri English Medium School, Davangere.
- More than 1000 biofuel samplings like Honge, Simaruba, Neem and Hippe were planted during the period.
- Produced 293 litters of bio-diesel from Honge seed. Utilized for office diesel vehicles and sold outside on demand. 2250 kgs of Honge cake produced was sold

**NICRA Project:**

- Farm Ponds constructed in 15 farmer's field
- Insitu moisture conservation (ploughing across the slope).
- Introduced drought tolerant, short duration varieties of Redgram, Finger millet (ML-365) and Alphanso mango and Drumstick benefiting 92 farmers.
- Preventive vaccination against foot and mouth disease done-38 livestock is vaccinated – 869 farmers are benefited.
- **Four Animal Helath check up done and treated 51 animals.**
- Perennial and silage production taken up with 35 farmers
- Organized exposure visit to CRIDA, Hyderabad and ICRISAT, Hyderabad for 13 Farmers.
- Custerm hiring centre activities benefited 150 farmers and generated Rs. 9090 income.

**Important activities held at ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere related to Swachhta Pakhwada during 16 to 31 October, 2016.**

Sl. No.	Name of Activities related to Swachhta Pakhwada	Location (KVK campus/village name/name of other locations)	Important person/ dignitaries/ VIPS attended the activities
1	<ul style="list-style-type: none"> <li>• Taken Swachhata Oath by KVK staff along with farmers.</li> <li>• Awareness programme on Swachh Bharath Andolan through KASA-RASA Abhiyana</li> </ul>	ICAR-Taralabalu Krishi Vigyan Kendra, Davanaagere Davanagere city	All the KVK staff  Kasa Rasa Abhiyana, Core Committee Members headed by Dr. Shantha Bhat, Renowned Gynecologicist, Davanagere
2	Awareness programme on Swachh Bharath Andolan in Raitha Samparka Kendra, Nyamathi, Honnali Taluk	Raitha Samparka Kendra, Nyamathi, Honnali Taluk	Dr. Veerabhadrappa, Agriculture Officer, Dept. of Agriculture, Davanagere
3	Awareness programme on Swachh Bharath Andolan along with field day Siddanuru, Davanagere district.	Siddanuru, Davanagere District (NICRA village)	Dr. Sreenath Dixit, Director, ATARI, Bengaluru
4	Awareness programme on Swachh Bharath Andolan on the occasion of training programme on 'Sandalwood and other forestry technologies'.	ICAR-Taralabalu Krishi Vigyan Kendra, Davanaagere	Sri Manjunatha, Deputy Conservator of Forest and Sri Gopya Naik, Assistant conservator of Forest, Dept. of Forestry, Davanagere and Dr. Somashekhar, Research officer, Institute of Wood And Science and Technology, Bengaluru, Dr. Umesh and Dr. Narasihmamurthy, Assistant Directors of Agriculture, Dept. of Agriculture, Davanagere

5	Exhibition stall arranged at Krishi Mela organized by UAHS, Shimoga from 21-10-2016 to 24-10-2016	UAHS, Shimoga	Dr. Vasudevappa, Vice Chancellor, Dr. T.H.Gowda, Director of Extension and Director of Research, Professors of UAHS, Shimoga
6	Organized awareness programme on Swaccha Bharath Andholan	Marikunte village, Jagalur Taluk, Davanagere district.	Dr. Spoorthy, Deputy Director, Dept. of Agriculture, Davanagere, Dr Ramappa Patil, Extension Leader, ZAHRS, Kathalagere, UAHS, Shivamogga
7	Organized awareness programme on Swaccha Bharath Andholan	Kanavihalli, Harapanahalli taluk, Davanagere district.	Along with FLD faremrs

## SUMMARY FOR 2016-17

## I. TECHNOLOGY ASSESSMENT

## Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	Onion	Role of sulphur in improving the productivity of onion	05
Varietal Evaluation	Foxtail millet	Assessment of Foxtail Millet (Navane) Varieties for higher yield under rainfed situated	03
	Bengalgram	Assessment of Bengalgram Variety for Wilt and Drought	03
Integrated Pest Management	Banana	Assessment of different molecules for Banana skipper management	03
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			
Others (Pl. specify)			
<b>Total</b>			<b>14</b>

**Summary of technologies assessed under livestock**

<b>Thematic areas</b>	<b>Name of the livestock enterprise</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management	Dairy	Effect of feeding urea treated paddy straw along with grain mixture for better performance in Dairy Animals.	05
Production and Management			
Others (Pl. specify)			
<b>Total</b>			<b>05</b>

**Summary of technologies assessed under various enterprises**

<b>Thematic areas</b>	<b>Enterprise</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>

**Summary of technologies assessed under home science**

<b>Thematic areas</b>	<b>Enterprise</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>

**II. TECHNOLOGY REFINEMENT****Summary of technologies refined under various crops**

<b>Thematic areas</b>	<b>Crop</b>	<b>Name of the technology refined</b>	<b>No. of trials</b>
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			
Others (Pl. specify)			
<b>Total</b>			

**Summary of technologies assessed under refinement of various livestock**

<b>Thematic areas</b>	<b>Name of the livestock enterprise</b>	<b>Name of the technology refined</b>	<b>No. of trials</b>
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
<b>Total</b>			

**Summary of technologies refined under various enterprises**

<b>Thematic areas</b>	<b>Enterprise</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>

**Summary of technologies refined under home science**

<b>Thematic areas</b>	<b>Enterprise</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>



## III. FRONTLINE DEMONSTRATION

## Crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<b>Cereals</b>																		
Maize + Redgram	ICM	Integrated crop management in Maize with emphasis on IPDM practices	-	15	06	38.77	33.42	16.0	Plant height of Maize (cm)-165.57 Number of rows/cob (No.)-12.93 Stem borer incidence in maize(%)-3.0	159.67 12.53 9.0	35706	58162	22455	1.62	33688	50138	16499	1.48
<b>Millets</b>																		
Finger Millet	ICM	HYV drought tolerant ML-365 Spraying of water soluble fertilisers		25	10	31.3	28.9	30.03	Plant height (cm) – 114.5 No. of tillers/hill-7.98 Fodder yield(q/ha)-53.24	1037 6.14 49.25								
Sorghum	Integrated Crop Management	Integrated Crop Management in Sorghum		10	04	8.90	7.4	20.3	<b>21.3</b>	<b>19.6</b>	18250	27590	9340	1.51	16250	22940	6690	1.41
									<b>40.21</b>	<b>37.15</b>								
<b>Oilseeds</b>																		
Sunflower	ICM	1.Nutrient Managment Pest and disease Managment Weed Managment		65	26	16.5	11.3	46.01	Plant height (cm) –17.2 Head size cm-13.85 Test weight (g) -56.28	167.8 11.15 47.15	27393	72063	44671	2.63	23255	49202	25948	2.12

<b>Pulses</b>																		
Redgram	ICM	Integrated crop management in Redgram-BRG-5 (NFSM)		25	10	9.4	8.5	9.57	Germination (%) - 83 Plant height (cm) - 160.92 No. of branches (nos.) - 5.82 No of pods (nos.) - 70.9 Pod filling (%) - 58.84 Pod length (%) - 7.10 Wilt incidence (%) - 3.0 Pod borer incidence (%) - 4.0	81 152.08 5.25 61.80 51.4 6.70 5.0 8.0	11750	31960	20210	2.70	12500	26350	13850	2.11
<b>Pulses-Field Bean</b>	ICM	Variety -HA-4 Use eof water souluble fertilsers		05	02	11.9	9.25	10.83	Plant height(cm) - 63.26 Pod borer(%)- 4.98 Pods/plant- 112.4	52.10 17.86 101.8	16180	30750	14750	1.90	16000	25950	9950	1.62
<b>Bengal gram</b>	ICM	Use of Bio fertilsers for seed treatment Use of Pulse Magic @ 5kg/ha Use of Phermone traps @ 5 No.		25	10	11.9	9.25	10.83	Plant height (cm)-29.3 Wilt Incidence(%)- 4.02 No. of Pods/plant- 64.02	25.9 17.86 51.84	23962	67108	43146	2.80	21954	45632	23678	2.08
<b>Vegetables</b>	Integrated Crop Management	Integrated Crop Management in Chilli		05	02	179.82	162.32	10.78	192.76	182.32	43820.00	143856.00	100036.00	3.28	46880.00	129856.00	82976.00	2.77
<b>Flowers</b>																		
<b>Ornamental</b>																		
<b>Fruit</b>																		

Banana	IDM	Integrated management of sigatoka leaf spot in Banana		05	02	44.18	33.62	31.40	Incidence of leaf spot (%) - 6.20	18.72	84600	176728	92128	2.08	88960	134504	45544	1.51
<b>Commercial</b>																		
<b>Fibre crops like cotton</b>																		
<b>Cotton</b>	Integrated Crop Management	Integrated Crop Management in cotton		20	08	15.40	13.97	10.2	<b>7.45</b>	<b>12.94</b>								
									7.31	21.35	28600.00	75447.75	46847.75	2.64	29300.00	68462.80	39162.80	2.34
<b>Medicinal and aromatic</b>																		
<b>Fodder</b>																		
<b>Plantation</b>																		
Arecanut	ICM	ICM	--	05	01	18.00	11.65	54,5	Number of Inflorescence/plant- 7.0 4.0  Unprocessed nuts (kg/plant)- 8.97 5.8  Processed nuts(kg/plant)-1.44 0.93  Inflorescence Die back(%)- 2.46 9.14		139421-00	360000-00	220578-00	2.57	120396-00	233000-00	112603-00	1.92
Coconut	Intercropping	KDM-1 Drumstick as intercrop	--	10	4	14555 nuts/ha	8492 nuts/ha	71.39	Coconut yield(nuts/pal m)-124 63  Drumstick yield (pods/plant)- 87		51638-00	174660-00	123021-00	3.38	44113-00	101904-00	57790-60	2.31
<b>Fibre</b>																		

## Livestock

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy	Nutrition Management	Establishment of Fodder cafetariya	-	10	02 ha	31.6	24.6	28.2	-	-	18800	28215	9415	1.5	14600	19800	5200	1.35
	Nutrition Management	Integrated Management of dairy animals for better performance (Feeding total mixed ration)	-	01	05	9.65	8.80	9.6	1.028	1.025	117	241.25	124.25	2.06	89	130	41	1.46
Poultry																		
Rabbitry																		
Pigerry																		
Sheep and goat	Nutrition Management	Balanced feeding and total deworming in small ruminants for better body weight gain	-	10	10	55.3 Sheep Body weight in kg/60 days	46.0 Sheep Body weight in kg/60 days	15.67 Sheep Body weight in kg/60 days	76% of the animals attained naturity during the period and taken Ram	Only 40% of the animals attained maturity and taken Ram	4248	11060	6812	2.6	30000	6600	3600	2.2
Duckery																		
<b>Total</b>																		

## Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																		
Mussels																		
Ornamental fishes																		
<b>Total</b>																		

## Other enterprises

Category	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit				
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Oyster mushroom																		
Button mushroom																		
Vermicompost																		
Sericulture																		
Apiculture																		
Others																		
<b>Total</b>																		

**Women empowerment**

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
<b>Women</b>						
Pregnant women						
Adolescent Girl						
Other women						
<b>Children</b>						
Neonats						
Infants						
Children						

**Farm implements and machinery**

Name of the implement	Crop	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)					
						Demonstration	Check											

Other enterprises: Nil

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demonstration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11
<b>Cereals</b>										
Maize+ Redgram	Private	15	06	38.77	33.42	16.0	35706	58162	22455	1.62
Others										
<b>Total</b>										
<b>Oilseeds</b>										
Castor										
Mustard										
Safflower										
Sesame										
Oilseeds-Sunflower	MSFH-17	65	26	16.5	11.3	46.01	27393	72063	44671	2.63
Groundnut										
Soybean										
<b>Total</b>										
<b>Pulses</b>										
Greengram										
Blackgram										
Bengalgram										
Redgram										
<b>Total</b>										
<b>Vegetable crops</b>										
Bottle gourd										
Capsicum										

Others										
<b>Total</b>										
Cucumber										
Tomato										
Chilli										
Okra										
Onion										
Potato										
Field bean										
Others										
<b>Total</b>										
<b>Commercial crops</b>										
Sugarcane										
Coconut										
Cotton	Vikarm BG-II (Bt)	20	8	15.4	13.97	10.2	28600	75447.75	46847.75	2.64
<b>Total</b>										
Fodder crops										
Maize (Fodder)										
Sorghum (Fodder)										
Others										
<b>Total</b>		<b>100</b>	<b>40</b>							

## IV Trainings

### 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	
1	2	3	4	5	6	7	8	9	10	11	
<b>Crop Production</b>											
Weed Management											
Resource Conservation Technologies											
Cropping Systems											
Crop Diversification											
Integrated Farming											
Micro Irrigation/Irrigation											
Seed production											
Nursery management											
Integrated Crop Management	1	16	0	16	2	0	2	18	0	18	
Soil and Water Conservation											
Integrated Nutrient Management											
Production of organic inputs											
<b>Others</b>											
d) Seed treatment	1	12	0	12	2	0	2	14	0	14	
e) Bio fuel production and use of bioproducts											
<b>Horticulture</b>											
<b>a) Vegetable Crops</b>											
Production of low value and high volume crop											
Off-season vegetables											



Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others a)Kitchen garden and terrace gardening	2	1	62	63	53	0	53	54	62	116
<b>b) Fruits</b>										
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										
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others a)										
<b>d) Plantation crops</b>										
Production and Management technology	2	52	0	52	7	0	7	59	0	59
Processing and value addition										
Others 1. Dryland horticulture										
<b>e) Tuber crops</b>										
Production and Management technology										

Processing and value addition										
Others										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
<b>Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated nutrient management	1	21	12	33	3	0	3	24	12	36
Production and use of organic inputs	1	36	1	37	0	0	0	36	1	37
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others										
<b>Livestock Production and Management</b>										
Dairy Management	2	10	24	34	2	0	2	12	24	36
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	2	18	0	18	5	0	5	23	0	23

Animal Disease Management										
Feed and Fodder technology	1	12	0	12	1	0	1	13	0	13
Production of quality animal products										
<b>Others:</b> a) Preparation of vermicompost										
<b>Home Science/Women empowerment</b>										
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 –Production Technology of Mushroom	1	56	14	70	15	4	19	71	18	89
<b>Agril. Engineering</b>										
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										
<b>Plant Protection</b>										

Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
<b>Others a) Apiculture</b>										
<b>Fisheries</b>										
Integrated fish farming	1	6	0	6	0	0	0	6	0	6
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 -1. Recent technologies in aquaculture										
<b>Production of Inputs at site</b>										
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 –Bio-gas production										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (PUC students orientation)	2	172	100	272				172	100	272
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>17</b>	<b>412</b>	<b>213</b>	<b>625</b>	<b>90</b>	<b>4</b>	<b>94</b>	<b>502</b>	<b>217</b>	<b>719</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	
1	2	3	4	5	6	7	8	9	10	11	
<b>Crop Production</b>											
Weed Management	2	82	0	82	16	0	16	98	0	98	
Resource Conservation Technologies											
Cropping Systems											
Crop Diversification											
Integrated Farming											
Micro Irrigation/Irrigation											
Seed production											
Nursery management											
Integrated Crop Management	5	71	0	71	32		32	103		103	
Soil and Water Conservation											
Integrated Nutrient Management	3	59	0	59	6	0	6	65	0	65	
Production of organic inputs											
Others a) seed treatment	3	112	0	112	7	0	7	119	0	119	
f) Mechanized transplanting in paddy											
<b>Horticulture</b>											
<b>a) Vegetable Crops</b>											
Production of low value and high volume crop	1	7	0	7	2	0	2	9	0	9	
Off-season vegetables											
Nursery raising											
Exotic vegetables											
Export potential vegetables											
Grading and standardization											
Protective cultivation Other (Kitchen and Terrace garden)	1	33	19	52	0	0	0	33	19	52	
<b>b) Fruits</b>											
Training and Pruning	2	14	0	17	13	0	13	30	0	30	

Layout and Management of Orchards										
Cultivation of Fruit	1	12	0	12	0	0	0	12	0	12
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
<b>Others : a) Integrated nutrient management in Mango</b>	1	13	0	13	0	0	0	13	0	13
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others										
<b>d) Plantation crops</b>										
Production and Management technology	1	22	0	22	2	0	2	24	0	24
Processing and value addition										
<b>Others</b>										
c) Intercropping in coconut and arecanut										
d) Green manuring										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										
Others										

<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
<b>Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated nutrient management	3	41	0	41	5	0	5	46	0	46
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										
<b>Livestock Production and Management</b>										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology	1	15	0	15	3	0	3	18	0	18
Production of quality animal products										
Others										
<b>Home Science/Women empowerment</b>										
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										
<b>Agril. Engineering</b>										
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										
<b>Plant Protection</b>										
Integrated Pest Management	4	50	0	58	22	0	22	80	0	80
Integrated Disease Management	3	50	0	50	17	0	17	67	0	67
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others										
<b>Fisheries</b>										

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										
<b>Production of Inputs at site</b>										
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 –FOCT										
<b>Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others										
<b>Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
<b>TOTAL</b>	<b>31</b>	<b>592</b>	<b>19</b>	<b>611</b>	<b>125</b>	<b>0</b>	<b>125</b>	<b>717</b>	<b>19</b>	<b>736</b>

**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	
1	2	3	4	5	6	7	8	9	10	11	
Nursery Management of Horticulture crops											
Training and pruning of orchards											
Protected cultivation of vegetable crops											
Commercial fruit production											
Integrated farming	1	16	11	27	0	1	1	16	12	38	
Seed production	1	12	12	24	0	0	0	12	12	24	
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										
<b>Others.</b>										
IV. Role of Rural Youth in Agriculture	1	43	32	75	12	6	18	55	38	93
V. Ex- trainees sammelan for FOCT trainees										
VI. Soil and water conservation										
<b>TOTAL</b>	<b>3</b>	<b>71</b>	<b>55</b>	<b>126</b>	<b>12</b>	<b>7</b>	<b>19</b>	<b>83</b>	<b>62</b>	<b>145</b>

**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										
<b>TOTAL</b>										

### 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	1	36	1	37	7	0	7	43	1	44
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	1	46	0	46	2	0	2	48	0	48
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	01	19	-	19	05	-	05	24	-	24
Household food security										
<b>Any other</b>	1	19	0	19	9	0	9	28	0	28
a) Safe use of pesticide										
b) Technology transfer mechanism in Animal science										

c) Biofuel training to gram panchayath officials and elected members										
d) Management of Horticulture crops	1	28	0	28	6	1	7	34	1	35
e) Post harvest technologies	1	14	5	19	2	0	2	16	5	21
<b>Total</b>	<b>6</b>	<b>162</b>	<b>6</b>	<b>168</b>	<b>31</b>	<b>1</b>	<b>32</b>	<b>193</b>	<b>7</b>	<b>200</b>

**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										
<b>Any other a) Integrated farming system</b>										
<b>Total</b>										



## 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	2	3	4	5	6	7	8	9	10	11	12	
<b>1</b>	<b>Crop production and management</b>											
1.a.	Increasing production and productivity of crops											
1.b.	Commercial production of vegetables											
<b>2</b>	<b>Production and value addition</b>											
2.a.	Dryland horticulture	3	98	3	101	12	0	2	110	3	113	
2.b.	Ornamental plants											
2.c.	Spices crops											
<b>3.</b>	<b>Soil health and fertility management</b>											
<b>4</b>	<b>Production of Inputs at site</b>											
<b>5</b>	<b>Methods of protective cultivation</b>											
<b>6</b>	<b>Others :</b>											
	a) Kitchan and Terrace Gardening	4	17	364	381	36	21	57	53	385	438	
	b)Vegetables seed production	1	27	0	27	18	0	18	45	0	45	
<b>7</b>	<b>Post harvest technology and value addition</b>											
7.a.	Processing and value addition											
7.b.	Others											
<b>8</b>	<b>Farm machinery</b>											
8.a.	Farm machinery, tools and implements											
8.b.	Others											
<b>9.</b>	<b>Livestock and fisheries</b>											
<b>10</b>	<b>Livestock production and management</b>											
10.a.	Animal Nutrition Management	1	24	0	24	0	0	0	24	0	24	
10.b.	Animal Disease Management											
10.c	Fisheries Nutrition											
10.d	Fisheries Management											
10.e.	Others : Livestock based employment opportunity											
10.f	Profitable dairying through group action											
10.g	Integrated dairying and vermicompost											

1	2	3	4	5	6	7	8	9	10	11	12
<b>11.</b>	<b>Home Science</b>										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others										
<b>12</b>	<b>Agricultural Extension</b>										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others : 1.Sandalwood and other forestry technologies	1	82	20	102	8	4	12	10	24	114
	2. Protection of Plant Varieties and Farmers Right Act										
	<b>Total</b>	<b>10</b>	<b>248</b>	<b>387</b>	<b>365</b>	<b>74</b>	<b>25</b>	<b>99</b>	<b>322</b>	<b>412</b>	<b>734</b>

#### Details of sponsoring agencies involved

9. Department of Horticulture, Davanagere.
10. Bayer Crop Science Ltd.
11. Institute of Wood Science and Technology, Bengaluru.
12. IAT, Davanagere
13. NFDB, Hyderabad.
14. Suvarna Agro Technology
15. Sujala-III, KWDP-II, Department of Horticulture, Davanagere
16. Department of Horticulture, Davanagere.
17. Bayer crop Science

## 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	2	3	4	5	6	7	8	9	10	11	12	
<b>1</b>	<b>Crop production and management</b>											
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											
<b>2</b>	<b>Post harvest technology and value addition</b>											
2.a.	Value addition											
2.b.	Others											
<b>3.</b>	<b>Livestock and fisheries</b>											
3.a.	Dairy farming											
3.b.	Composite fish culture	2	39	3	43	10	1	11	49	4	53	
3.c.	Sheep and goat rearing											
3.d.	Piggery											
3.e.	Poultry farming											
3.f.	Others											
<b>4.</b>	<b>Income generation activities</b>											
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.											

1	2	3	4	5	6	7	8	9	10	11	12
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	<b>Others:</b> Coconut climbing and plant protection										
<b>5</b>	<b>Agricultural Extension</b>										
5.a.	Capacity building and group dynamics										
5.b.	Others										
	<b>Grand Total</b>	<b>2</b>	<b>39</b>	<b>3</b>	<b>42</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>49</b>	<b>4</b>	<b>53</b>

### PART VIII – EXTENSION ACTIVITIES

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

Activities	No. of Activities	No. of Participants	
		No. of Farmers	No. Extension Personnel
Field Day	11	475	47
Animal health campaign	02	166 Animal treated	
Kisan Mela	01	50000	200
Exhibition	05	350270	664
Film Show	02	15	22
Method Demonstrations	32	919	119
Farmers Seminar	05	522	27
Farm Science Club (DDFA)	06	84	07
Group meetings			
Lectures delivered as resource persons	92	9986	1064
Newspaper coverage	85		
Radio talks	09		
TV talks	03		
Popular articles	08		
Scientific visit to farmers field	185	2196	376
Advisory over phone	574	574	
Farmers visit to KVK	2020	3767	52

Diagnostic visits	39	217	68
Exposure visits	02	53	09
Ex-trainees Sammelan			
Soil test campaigns	01	25	
Meeting/workshops with extension offiicals	08		838
Celebration of Days	08	1145	56
Kisan Ghosti	09	9000	50
KMAS	30	7000	

### **PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS**

#### **. Production of seeds by the KVKs**

<b>Crop category</b>	<b>Name of the crop</b>	<b>Variety</b>	<b>Hybrid</b>	<b>Quantity of seed (qtl)</b>	<b>Value (Rs)</b>	<b>Number of farmers</b>
Cereals (crop wise)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables	Drumstick	KDM-1 (Bhagya)	-	1.575	40762.50	11
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Green manure						
Others						
<b>Total</b>				1.575	40762.50	11

**Production of planting materials by the KVKs**

<b>Crop category</b>	<b>Name of the crop</b>	<b>Variety</b>	<b>Hybrid</b>	<b>Number</b>	<b>Value (Rs.)</b>	<b>Number of farmers</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Commercial						
Vegetable seedlings	Drumstick	KDM-1 (Bhagya)	-	15,087	1,81,044.00	48
Fruits	Mango	Alphonso	-	1,176	43,800.00	07
Ornamental plants						
Medicinal and Aromatic						
Plantation	Arecanut	Channagiri Local	-	5,005	1,25,125.00	17
	Coconut	Arasikere tall	-	3,468	147779.999	
Spices						
Tuber						

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Fodder slip	Guinea	BG-9	-	1100	550	02
Fodder cuttings	Napier	DHN-6	-	1750	350	05
Forest Species						
<b>Total</b>				<b>27586</b>	<b>4,98,648.99</b>	<b>79</b>

**Production of Bio-Products**

Bio Products	Name of the bio-product	Quantity (Kg)	Value (Rs.)	Number of farmers
Bio Fertilizers	Azolla	36	720	16
Bio-pesticide	--			
Bio-fungicide	<i>Trichoderma</i>	31	3720	05
Bio Agents	Eathworm	57.1	17130	23
Others	Vermicompost	8477	84770	185
	Banana Special	2562	448350	496
	Vegetable Special			
	Milk	9510.5	323357	302
	<i>Pseudomonas flurescence</i>			
<b>Total</b>		<b>31,238.6</b>	<b>939606.829</b>	<b>1027</b>

**Production of livestock materials**

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers
1	2	3	4	5
<b>Dairy animals</b>				
Cows				
Buffaloes				
Calves	HF x	04	10000.00	2
Others	-	04	10000.00	2

1	2	3	4	5
<b>Poultry</b>				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others				

<b>Piggery</b>				
Piglet				
Others				
<b>Fisheries</b>				
Fingerlings				
Ornamental fishes	Guppies, Mollies, Sword tails	3161	30058	66
<b>Total</b>		<b>3169</b>	<b>50058</b>	<b>70</b>

#### VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2016-17

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)	Soil Health Card
Soil	1254	1024	786	123300	1254
Water	1140	905	719	57000	
Plant					
Manure	-				
<b>Total</b>					

#### VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted - 1

#### IX. NEWSLETTER

Number of issues of newsletter published : Nil

#### X. RESEARCH PAPER PUBLISHED

Number of research paper published - 3

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

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