PART I - GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
KRISHI VIGYAN KENDRA, HIREHALLI, TUMAKURU-572 104	0816-2243175	0816-2243177	iihrkvk@gmail.com	**www.iihrkvk.org**

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

Address	Telephone		E mail	Web Address
	Office	FAX		
INDIAN INSTITUTE OF HORTICULTURAL RESEARCH Hessaraghatta Lake Post, Bengaluru-560089	080-28466420	080-28466291	director@iihr.res.in, iihrdirector@gmail.com	www.iihr.res.in

1.3. Name of the Programme Co-or dinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. N.Loganandhan	-	8277252099	loganandhan@gmail.com

1.4. Year of sanction: 24th, March 2009

1.5. Staff Details as on 31.04.2016

Sl. No.	Sanctioned Post	Name of the Incumbent	Designation	M/ F	Discipline	Highest Qualification (for PC, SMS and Prog. Asst.)	Pay Scale	Basic Pay	Date of Joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1.	Programme Co-ordinator	Dr. N.Logannadhan	Programme Coordinator	M	Agril.Extn	Ph.D. Agriculture	37400-67000+9000	38800	02.08.2013	Permanent	Others
2.	SMS	Sri K.N. Jagadish	SMS (Agril.Extn.)	M	Agril.Extn.	M.Sc. Agriculture	15600 - 39100+5400	18950	17.11.2009	Permanent	OBC
3.	SMS	Sri P.R.Ramesh	SMS (Soil Science)	M	Soil Science	M.Sc. Agriculture	15600 - 39100+5400	18950	17.11.2009	Permanent	OBC
4.	SMS	Sri Prashanth J.M	SMS (Horticulture)	M	Horticulture	M.Sc. Agri Horticulture	15600 - 39100+5400	18950	24.11.2009	Permanent	Others
5.	SMS	Sri B. Hanumanthe Gowda	SMS (Plant Protection)	M	Plant Protection	M.Sc. Agriculture	15600 - 39100+5400	18950	02.12.2009	Permanent	Others
6.	SMS	Ms. RadhaR.Banakar	SMS (Home Science)	F	Home Science	M.Sc. Home Science	15600 - 39100+5400	18950	05.12.2009	Permanent	Others
7.	SMS	Dr. Somashekhar	SMS (Plant Breeding)	M	Plant Breeding	Ph.D. Agriculture	15600 - 39000+5400	18950	07.12.2009	Permanent	Others
8.	Farm Manager	Sri H.D.Parashuram	Farm Manager	M	Horticulture	B.Sc.	9300 - 34800+4600	14920	25.07.2013	Permanent	Others
9.	Prog. Asst. (Comp.)	Ms. Jyoti Appu Naik	Prog. Asst. (Comp.)	F	Information Science	B.E.	9300 - 34800+4200	11470	30.09.2009	Permanent	PH
10.	Prog. Asst. (Lab Tech.)	Sri Shashidhara K N	Prog. Asst. (Lab Tech.)	M	Crop Physiology	M.Sc Agri	9300 - 34800+4200	10130	17.10.2012	Permanent	SC
11.	Assistant	Vacant	Assistant				9300 - 34800+4200	-	-	-	-
12.	Jr.Stenographer	Smt.VedaKurnalli	Jr.Stenographer	F	Stenographer	DCP	5200 - 20200+2400	8770	17.02.2010	Permanent	Others
13.	Driver	Sri M.H.Ningappa	Driver	M	Driver	S.S.L.C.	5200 - 20200+2000	7830	30.12.2009	Permanent	ST
14.	Driver	Sri Hemanth Kumar	Driver	M	Driver	S.S.L.C	5200 - 20200+2000	7540	04.01.2010	Permanent	OBC
15.	Supporting Staff	Sri G.Manjanna	Supporting Staff	M	Supporting Staff	P.U.C.	5200 - 20200+1800	5860	01.11.2011	Permanent	SC
16.	Supporting Staff	Sri C.M.Anjanappa	Supporting Staff	M	Supporting Staff	7	5200 - 20200+1800	8510	16.10.2015	Permanent	Others

1.6. Total land with KVK (in ha) : 16.8 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.6
2.	Under Demonstration Units	3.28
3.	Under Crops	10.70
4.	Orchard/Agro-forestry	0.50
5.	Others	-

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	20.9.2012	283	5199683	-	-	-
2.	Farmers Hostel	ICAR	20.9.2012	305	6000000	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total Kms. Run	Present status
Bolero Diesel Jeep	2009	5,96,783	1,50,480	Good condition
Motor Cycle	2010	52,658	39,000	
Honda – Aviator	2010	46,025	29,100	
Power Tiller	2010	1, 42,400	600 hours	
Tractor	2011	5,60,000	1,322 hours	

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Fax Machine	2010	21381	Good condition
Xerox Machine	2010	67262	
Camera Nikon – Digital	2010	24950	
Computer with Accessories	2010	49900	
White Board with Stand	2010	1500	
LCD Projector with Accessories	2010	100000	

1.8. Details SAC meeting conducted in 2015-16

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	2.2.2016	45	1	1.Off-campus Training Programmes at NGO premises in the respective taluks need to be organized	1. A Training Programme on Proper cultivation practices of Moringa has been organized on 26.2.2016 at Balenahalli, Sira taluk in collaboration with mother NGO about 30 Moringa growers have participated.
2.				2.Production of Arka Microbial Consortium (AMC) has to be increased to meet the high demand among farmers.	2. A project worth 4.8 lakhs has been sanctioned for Increased Production of Arka Microbial Consortium (AMC) with the support from NABARD.
3.				3.Malnutrition focused Kitchen garden programmes need to be organized.	3. a) Awareness cum Training Programmes have been scheduled from 4th March 2016 onwards, covering 750 Rural Women from Tumakuru, Pavagada, Madhugiri and Koratagere Taluks on the topic of Nutrition Garden. b). A Project on Food and Nutrition security for farm women was submitted by SMS (Home Science) with support from ICAR-ATARI.
4.				4. Efforts need to be taken on control of vertebrate pests (Monkey, Wild boars, Bears etc) and Bird menace in the farmers fields.	4. An FLD on control of Wild boar in Kariyammana Palya, Pavagada Taluk has been proposed and accepted for the year 2016-17.
5.				5.Topics on safe use and disposal of plastic mulches in the farmers fields need to be included in the Awareness and Training programmes.	5. In the proposed FLD on ICM in Tomato, care has been taken to increase the polymuch thickness from 50 micron to 80 micron to avoid tearing of sheets and concerned Training will be given for safe disposal of them after use.
6.				6.Marketing linkage for Mangoes, Coconuts, Jack fruit products and Minor millets need to be given.	6. An EDP has been proposed to link the value added products of Jackfruit of Women SHG “HalliSiri” to market and the same has been approved for the year 2016-17.
7.				7.Mango campaign / FLD covering all the technologies	7. A campaign programme on Production and Post Harvest

				related to proper cultivation of Mangoes need to be organized.	Technologies of Mango as a part of ongoing FLD has been organized on 15.2.2016 at Bukkapatna, Sira Taluk.
8.				8.Training Programmes on Organic farming, Non-pesticide management to be organized.	8. Periodic Training Programme son Practices of Organic Farming are being organized by SMS, Soil Science
9.				9. Support to State Department of Agriculture for Soil sample analysis is sought.	9. About 10, 000 Nos. of Soil Samples are supposed to be analyzed at KVK for state Dept. of Agri. in the year 2016-17.
10.				10. Technical Support to FPOs of NGOs and NABARD is necessary.	10. Support has already been extended to two of FPOs (Kasturi Rangappa Nayaka Thotagarika Krushi Uthpannagala Samaskarane Mattu Marata Sowharda Sahakarai, SWAVALAMBI Agriculture Crop Producer Organisation) under OREDR NGO in Sira Taluk and an awareness cum interaction Programme on Role of KVK in supporting FPOs was organized on 24.2.2016 for the FPOs under DHAN foundation (Sira and Pavagada Taluks)

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1.	Dry Land Agriculture
2.	Dry Land Horticulture
3.	Dairy

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

S. No	Agro-climatic Zone	Characteristics
1.	Central Dry Zone (Zone IV) Taluks: Koratgere, Madhugiri, Sira, Pavagada	• This zone covers an area of 4.74 Lakhs hectare • The Annual rainfall ranges from 454 and 718 mm, of which more than 55% received in Kharif season. • The elevation ranges from 639 and 1197m • Soils are red sandy loams in major areas, shallow to deep black in remaining areas. • The major crops grown are Ragi, Paddy, Redgram, Groundnut, Sunflower, Coconut, Arecanut, Mango, Banana, Tomato, Brinjal, Beans, Peas, Aster, Dairy
2.	Eastern Dry Zone (Zone V) Taluk: Tumakuru	• This zone covers an area of 1.04 Lakh hectares. • The Annual rainfall ranges from 679 and 889 mm, of which more than 50% received in Kharif season. • The elevation is 818 m from sea level. • Soils are red loamy in major areas, shallow to deep black in remaining areas. • The major crops grown are Groundnut, Maize, Paddy, Ragi, Redgram, Tomato, Brinjal, Mango,Sapota, Arecanut,Coconut, Aster,Dairy

S. No	Agro ecological situation	Characteristics
1.	Agro eco sub region-1	Hot moist, semiarid ESR with LGP 150-180 days (LGP-length of growing period)

2.3 **Soil type/s**

S. No	Soil type	Characteristics	Area in ha
	Red Sandy Loam	• Colour given by haematites or Yellow limonites • Poor in soil fertility • Low Base Exchange capacity • Deficient in organic matter • Low water holding capacity • The pH ranges from 5.5.-6.5 • Low cohesion, plasticity & swelling	6, 15,230
	Red Loam	• Colour given by oxides of iron • Poor in soil fertility • Low- medium Base Exchange capacity • Deficient in organic matter • Low water holding capacity • The pH ranges from slightly acidic or neutral	2, 04,093

		• Low cohesion , plasticity & swelling	
	Shallow Black Soil	• Colour varying from dark brown to dark yellowish brown • Soil with more than 35 % clay and crack when dry. • High soil fertility • High base exchange capacity • High organic matter content • High water holding capacity • The pH ranges from 7.5 -8.5 • High cohesion, plasticity & swelling	2, 45,432

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Rice	10,578	38,892	3,677
2.	Jowar	2,225	1,176	528
3.	Ragi	1,75,024	2,32,364	1328
4.	Maize	24,987	59,542	2,383
5.	M.Millets	3428	1381	403
6.	Redgram	13317	5020	377
7.	Black gram	1047	132	126
8.	Horsegram	11713	3290	281
9.	Fieldbean	9754	2636	270
10.	Greengram	11131	1824	164
11.	Cowpea	4124	1263	306
12.	Groundnut	84237	35827	425
13.	Sesamum	345	57	164
14.	Sunflower	736	788	1071
15.	Castor	2290	780	340
16.	Niger	1377	233	169
17.	Cotton	695	3607	5
18.	Sugarcane	646	54884	85

(Source: District At a Glance-Tumakuru: 2014-15)

2.5. **Weather data**

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 15	81.75	33.87	20.57	93.17
May 15	168.5	32.77	20.66	96.74
June 15	65.5	30.36	20.98	95.33
July 15	67.8	30.23	20.1	94.7
August 15	132	30.34	20.36	97.23
September 15	184	30.31	19.74	97.87
October 15	134.75	30.91	19.18	98.29
November 15	169.75	27.07	18.69	97.97
December 15	6.75	29.52	16.39	98
January 16	81.75	33.87	20.57	93.17
February 16	168.5	32.77	20.66	96.74
March 16	65.5	30.36	20.98	95.33

Source: Automatic weather station at Hirehalli 2015-16(NICRA, CRIDA)

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

Category	Population	Production	Productivity
Cattle			
Crossbred	141190	54	5.5745
Indigenous	448036	56	2.0671
Buffalo	241907	68	2.5382
Sheep	**meat 000 tons**		
Crossbred	6565		--
Indigenous	1061132	17.31	--
Goats	517763	16.60	--
Pigs			
Crossbred	144	0.23	--
Indigenous	7531		--
Rabbits	121	NA	--
Poultry	**egg production in lakhs**		
Hens		--	--
Desi	711273	273	--
Improved		71	--

Category	Area	Production	Productivity
Fish			
Marine			
Inland	1306 ha	16,000 metric ton	650-700 kg/ha
Prawn			
Scampi			
Shrimp			

2.7 District profile has been **Updated** for 2015-16 Yes / No:**Yes**

2.8 Details of Operational area / Villages

S. No.	Taluk	Name of the block	Name of the Village	How long the Village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Tumakuru	Urdigere	Belagumba, Beliiibattalu, Vadderahalli, Haraluru	4 years	Ragi, Redgram, Paddy, Tomato, Brinjal, Mango, Banana, Arecanut	Water Scarcity, Low Yield , Old varieties, Poor Soil Management, Mono cropping	Integrated Crop Management, Integrated Nutrient Management and Soil test based fertilizer application
2.	Koratagere	Kollal	D, Nagenahlli, Baichanahalli, Vaddarahalli,	4 years	Ragi, Paddy, Redgram, Groundnut, Tomato, Arecanut, Frenchbean	Water scarcity, low yield, local variety, Delayed monsoon, Monocropping	Integrated Crop Management
3.	Madhugiri	Midigeshi	Hanumanthapura Siddapura, Chinnenahalli, Nagalapura	3years	Groundnut, Arecanut, Pomegranate, Ragi, Maize, Tomato	Water scarcity, low yield, local variety, Delayed monsoon, Monocropping	Integrated Crop Management
4.	Sira	Kataveeranahalli, Sakshihalli	Kallambela Kumbarahalli, Ganadahunase	3years	Groundnut, Papaya, Toamto, Ragi, Redgram	Local Variety, Tikka Disease in Groundnut, Low Yield, Pest and Disease in Redgram , Water Scarcity	Varietal Evaluation & Integrated Crop Management
5.	Pavagada	Mangalvada	Arasikere,Madde	3years	Groundnut, Pomegranate, Ragi, Maize, Tomato, Redgram, Tamarind, Mango	Water Scarcity, Low yield, Local varieties, Low Soil Fertility, Monocropping, Bacterial Blight and wilt in Pomegranate	Integrated Disease Management, Integrated Crop Management

2.9. Priority thrust areas

S. No	Thrust area
1.	High Yielding varieties / Hybrids
2.	Seed treatment with Bio fertilizers and fungicides
3.	Soil test based fertilizer application
4.	Integrated Nutrient Management
5.	Intercropping / Mixed / Multistoried cropping system
6.	Seed Production Techniques in Vegetables and field crops
7.	Integrated Pest & Disease Management
8.	Post harvest technology in Vegetables and Fruits
9.	Soil and Water Conservation
10.	Drudgery Reduction
11.	Income Generating Activities and Value Addition
12.	Child and Women Care and balanced nutrition
13.	Integrated Cropping System

PART III - TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
3	3	9	8	14	13	110	91

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
64	69	1755	2148	334	548	10225	32652

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
19.6	18.32	9,5000	1.02 lakh
Seed Kit (Nos)	5,000		

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
-	-	6,500	7,480
		2,500 (Nos.)	584 (Nos.)

Others		Micro Nutrient Fertilizers (Kg)	
7		8	
Target	Achievement	Target	Achievement
Amla Candy-100 kg	280 kg	8,000	18,318
Amla Juice- 1000 ltrs	310 ltrs		
Ragi Malt- 50 kg	100 kg		
Mushroom spawn	357 kg		

3.B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in Sl.No.2.7

S. No.	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
													No.	Kg
1.	ICM	Arecanut	Inefficient use of space, weed menace, low soil fertility, lower income from mono cropping	Assessment of Areca nut -French bean intercropping system for high soil fertility and higher income	-	-	-	-	5	0.65	-	-	-	-
2.	High yielding variety and cropping system	Mango	Low soil fertility, Monocropping, Lower income	Assessment of Red gram: Green gram (1:4) as a intercrop in Mango orchard for climate resilient agriculture	-	-	-	-	5	0.19	-	-	-	-

3.		Pomegranate	Wilt problem	Evaluation of technology for management of Pomegranate wilt	-	2	-	-	6	-	-	-	1	70
4.	HYV	Groundnut	Low Yield, Foliar Disease		Demonstration of KCG-6 Groundnut Variety	-	-	-	4	3.45	-	-	-	-
5.	Drought Mitigation	Ragi	Low germination leading to 30-40 % reduction in yield		Management of Soil Surface Crust in Red Soils	1	-	-	5	-	-	-	1	96
6.	PHT	Ragi	Lack of Awareness on Processing , Value addition & Branding.		Branding and Labeling of value added products from Ragi	2	-	-	-	-	-	-	-	-
7.	ICM	Redgram	Local/Existing varieties are low yielding , More Incidence of pest and diseases in local/existing varieties.		Enhancement of Pigeon pea yield through introduction of BRG-5	1	-	-	5	0.75	-	-	-	-

8.	Variety introduction	Tomato	Bacterial wilt, leaf curl & Low yield		Introduction of Arka Rakshak F1 hybrid in Tomato	1	-	-	4	0.001	-	-	-	-
9.	ICM		Water Scarcity & Weed Menace	-	Use of Polythene mulch in Tomato	1	-	-	6	-	-	-	-	-
10.	ICM	Onion	Use of local low yielding varieties.		Integrated crop Management in Onion	1			5	0.25	-	-	-	-
11.	ICM	Pomegranate	High micronutrient deficiency, low fruit quality and yield		Integrated Crop Management in Pomegranate	2	-	-	4	-	-	-	-	-
12.	ICM	Banana	Low density and low yield		Demonstration of High density planting of Banana	1	-	-	4	-	5200	-	-	-
13.	IPM	Mango	Severe Stem Borer out break		Management of Mango Stem Borer by Sealer cum Healer	1	-	-	5	-	-	-	1	100

14.	Drudgery Reduction & PHT		Lack of knowledge PHT like proper harvesting, Ripening method, handling, packing, marketing strategies.		Improved practices of production and post - harvest in Mango	1	-	-	2	-	-	-	-	-
15.	ICM	China Aster	Small size flowers, diameter, less shelf life, low attractive colour and low yield		Demonstration of China Aster variety Arka Adya	1	-	-	4	0.01	-	-	-	-
16.	INM	Betelvine	Non application of Chemical Fertilizer, High Pest and Diseases incidence, Poor drained soils		Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine	1	-	-	4	-	-	-	1	120

3.B2. Details of technology used during reporting period

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 Areca nut -French bean intercropping system for high soil fertility and higher income	CPCRI, Kasaragod	Arecanut	5	-	-	-
2.	Assessment of Red gram: Green gram (1:4) as a intercrop in Mango orchard for climate resilient agriculture	IIHR, Bengaluru	Mango	5	-	-	-
3.	Evaluation of technology for management of Pomegranate wilt	IIHR, Bengaluru	Pomegranate	6	-	2	-
4.	Demonstration of KCG-6 Groundnut Variety	UAS, Bengaluru	Groundnut	-	4	-	-
5.	Management of Soil Surface Crust in Red Soils	AICRPDA and UAS, Bengaluru	Ragi	-	5	1	-
6.	Branding and Labeling of value added products from Ragi	UAS, Bengaluru	Ragi	-	-	2	-
7.	Enhancement of Pigeon pea yield through introduction of BRG-5	UAS Bengaluru	Redgram	-	5	1	
8.	Introduction of Arka Rakshak F1 hybrid in Tomato	IIHR, Bengaluru	Tomato	-	4	1	-
9.	Use of Polythene mulch in Tomato	IIHR, Bengaluru	Tomato	-	6	1	-
10.	Integrated crop Management in Onion	UAS Bengaluru and Dharwad	Onion	-	5	1	-
11.	Integrated Nutrient Management in Pomegranate	NRCP and IIHR, Bengaluru	Pomegranate	-	4	2	-
12.	Demonstration of High density planting of Banana	NRC on Banana, Trichy	Banana	-	4	1	-
13.	Management of Mango Stem Borer by Sealer cum Healer	IIHR, Bengaluru	Mango	-	5	1	-

14.	Improved practices of production and post - harvest in Mango	IIHR, Bengaluru	Mango	-	2	1	-
15.	Demonstration of China Aster variety Arka Adya	IIHR, Bengaluru	China Aster	-	4	1	-
16.	Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine	IIHR, Bengaluru	Betelvine	-	4	1	-

3.B2 contd..

No. of farmers covered															
OFT				**FLD**				**Training**				**Others (Specify)**			
General		**SC/ST**		**General**		**SC/ST**		**General**		**SC/ST**		**General**		**SC/ST**	
M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
9	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
3	-	-	-												
3	-	-	-												
3	-	-	-					32	8	2	3	-	-	-	-
				2	1	1	-	-	-	-	-	-	-	-	-
			-	6	1	2	1	62	10	10	3	-	-	-	-
				2 Groups	-	-	-	34	0	1	0	-	-	-	-
				13	2	6	4	-	-	-	-	-	-	-	-
				3	1	1	-	-	-	-	-	-	-	-	-
				1	1	1	-	133	29	11	4	-	-	-	-
				5	2	3	-	10	28	0	2	-	-	-	-
				6	1	3	-	-	-	-	-	-	-	-	-
				2	-	1	-	19	13	1	2	-	-	-	-
				4	1	-	-	-	-	-	-	-	-	-	
				2 Groups	-	-	-	111	19	9	2	-	-	-	-
				3	1	1	-	111	13	6	2	-	-	-	
				6	2	1	1	23	4	2	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 Crop Management						1		1		2
Integrated Disease Management						1				1
Total						**2**		**1**		**3**

4.A2. Abstract on the number of technologies refined in respect of crops -Nil

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

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

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) ha
Integrated Crop Management	Areca nut - French bean	Assessment of Areca nut -French bean intercropping system for high soil fertility and higher income and higher income	3	2	1.6
	Mango-Redgram+ Greengram	Assessment of Redgram:Greengram (1:4) as a intercrop in Mango orchard for climate resilient agriculture	3	3	0.4
Integrated Disease Management	Pomegranate	Evaluation of technology for management of Pomegranate wilt	3	3	1.8
Total			**9**	**8**	**3.8**

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

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

4.B.4. Technologies Refined under Livestock and other enterprises -Nil

4. C1.Results of Technologies Assessed

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	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
Arecanut	Irrigated	Inefficient use of space, weed menace, low soil fertility, lower income from mono cropping	Assessment of Areca nut - French bean intercropping system for high soil fertility and higher income	03	TO 1: Arecanut sole cropping	TO1: Arecanut yield Before Soil fertility status of the plot	1.09 t/ha/year Poor (N : 114 mg/kg P : 8.2 mg/kg K : 54 mg/kg) Organic Carbon (%) : 0.12	TO3 Recorded Highest production and income per unit area and increase in the organic carbon content	Farmers expressed the higher income obtained from adoption of French bean as intercrop with improved soil fertility status during Rabi /summer	-	-
					TO 2: Arecanut + Vegetable Cowpea	TO2: Cowpea parameter Plant height. (cm) No. of pods/plant (No.) Length of pods (cm) Cowpea yield t/ha After Soil fertility status **Arecanut Parameter**	 61.2 cm 52.2 15.4 cm 2.52 Improved (N : 128 mg/kg P : 9.2 mg/kg K : 73 mg/kg) Organic Carbon (%) : 0.42 1.18 t/ha/year				

					TO 3: Arecanut + Vegetable French bean	TO3: French bean parameter Plant height. (cm) pods/plant (No.) Length of pods (cm) French bean yield t/ha After Soil fertility status **Arecanut Parameter**	44.2 38.4 14.3 3.5 Improved (N : 154 mg/kg P : 9.4 mg/kg K : 92 mg/kg) Organic Carbon (%) : 0.51 1.18 t/ha/year				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	**14**	**15**	**16**	**17**	**18**
Technology option 1 (Farmer's practice)	FP	Arecanut yield : 1.09	t/ha/year	Arecanut : 1,45,050	2.98
Technology option 2	UAS (B)	Arecanut yield : 1.13 Cowpea yield : 2.52	t/ha/year t/ha	Arecanut : 1,53,120 Cowpea : 54,050	3.04
Technology option 3	CPCRI, Kasargod	Arecanut yield : 1.18 French bean : 3.5	t/ha/year t/ha	Arecanut : 1,63,050 French bean : 46,280	3.33

4.C2.Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1. Title of Technology Assessed : Assessment of Areca nut -French bean intercropping system for high soil fertility and higher income
2. Problem Definition : Inefficient use of land, weed menace, low soil fertility, lower income
3. Details of technologies selected for assessment:

Technology option 1 (Farmer's practice): Mono cropping
Technology option 2 : Areca nut + Vegetable Cowpea(0.8 ha)
Technology option 3 : Areca nut + Vegetable French bean (0.8ha)

4. Source of technology : **TO1:** FP **TO2:** UAS (B) **TO3:** CPCRI, Kasargod
5. Production system and thematic area : Irrigated and Cropping system
6. Performance of the Technology with performance indicators :

TO1: Arecanut yield: 1.09 t/ha/year
TO2: Arecanut yield: 1.13 t/ha/year + Cowpea yield: 2.52 t/ha
TO3: Arecanut yield: 1.18 t/ha/year + French bean yield: 3.5 t/ha

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8. Final recommendation for micro level situation : Highest bio mass production and income per unit area and increased in the organic carbon content in TO3
9. Constraints identified and feedback for research : Low market demand on vegetable cowpea
10. Process of farmers participation and their reaction: Group discussion and positive reaction by the farmers participation

2 .Mango											
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
Mango	Rainfed	Low soil fertility, Monocropping, Lower income	Assessment of Red gram: Green gram (1:4) as a intercrop in Mango orchard for climate resilient agriculture	03	TO1:Mango Sole crop TO2:Mango + Horsegram TO3:Mango + Red gram - Green gram (1:4)	TO1:Intercrop Yield Qtl/ha Organic Carbon %	- 0.4	TO3 Recorded Highest production and income per unit area and increase in the organic carbon content	Farmers expressed the higher income obtained from adoption of Redgram +Greengram as intercrop with improved soil fertility status during summer	-	-
						TO2:Intercrop Yield Qtl/ha Organic Carbon %	5.9 0.6			-	
						TO3:Intercrop Yield Qtl/ha Organic Carbon %	8.8 (1.7RG+ 6.9 GG) 0.75			-	

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		Mango yield : -	t/ha/year	-	-
Technology option 2	UAS B	Mango yield : - Horsegram yield : 5.9	t/ha/year Qtl/ha	- 27,820	2.1
Technology option 3	IHR Bengaluru	Mango yield : - Redgram +Greengram yield : 8.8	t/ha/year Qtl/ha	- 48,000	2.7

4.**C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details**

1. Title of Technology Assessed : Assessment of Red gram: Green gram (1:4) as a intercrop in Mango orchard for climate resilient agriculture
2. Problem Definition : Low soil fertility, Mono-cropping, Lower income
3. Details of technologies selected for assessment :

Technology option 1 (Farmer's practice):
Technology option 2 : Mango + Horsegram
Technology option 3 : Mango + Red gram - Green gram (1:4)

4. Source of technology : UASB and IIHR Bengaluru
5. Production system and thematic area :
6. Performance of the Technology with performance indicators :

Technology option 1 (Farmer's practice): -
Technology option 2 : Mango + Horsegram
Technology option 3 : Mango + Red gram +Green gram (1:4)

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8. Final recommendation for micro level situation : Highest bio mass production and income per unit area and increased in the organic carbon content in TO3
9. Constraints identified and feedback for research : Low market demand on Horsegram
10. Process of farmers participation and their reaction : Group discussion and positive reaction by the farmers participation

3. Pomegranate											
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
Pomegranate	Rainfed	Wilt problem	Evaluation of technology for management of Pomegranate wilt	03	FP-TO1: Application of FYM & Neem cake	% wilted plant % plants recovered	8.82 33.33	Application of Actinobacteria consortium was found very effective against the Pomegranate wilt	Formulation is very useful in controlling the disease with very low cost and eco friendly	-	-
					TO2:Drenching with Carbendazim @ 2gm/litre at 20 days interval.(20 litres of spray solution /plant – 3 times)	% wilted plant % plants recovered	12.50 79.16				
					TO3:Application of Actinobacteria consortium @20g/lt at 15 days intervals (5 times)	% wilted plant % plants recovered	12.98 81.48				

Technology Assessed	**Source of Technology**	**Production**	**Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)**	**Net Return (Profit) in Rs. / unit**	**BC Ratio**
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		9.47	t/ha	1,76,300	3.22
Technology option 2	UAS, Bengaluru	12.94	t/ha	1,81,700	4.27
Technology option 3	IHR, Bengaluru	13.59	t/ha	1,75,400	4.64

4.**C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details**

1. Title of Technology Assessed : Evaluation of technology for management of Pomegranate wilt resilient agriculture
2. Problem Definition : Low soil fertility, Mono-cropping, Lower income
3. Details of technologies selected for assessment :

Technology option 1 (Farmer's practice): Application of FYM & Neem cake
Technology option 2 : Drenching with Carbendazim @ 2gm/litre at 20 days interval.(20 litres of spray solution /plant – 3 times)
Technology option 3 : Application of Actinobacteria consortium @20g/lt at 15 days intervals (5 times)

4. Source of technology :UAS, Bengaluru and IIHR, Bengaluru
5. Production system and thematic area :
6. Performance of the Technology with performance indicators :

Technology option 1 (Farmer's practice): Application of FYM & Neem cake
Technology option 2 : Drenching with Carbendazim @ 2gm/litre at 20 days interval.(20 litres of spray solution /plant – 3 times)
Technology option 3 : Application of Actinobacteria consortium @20g/lt at 15 days intervals (5 times)

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :
8. Final recommendation for micro level situation : -
9. Constraints identified and feedback for research : -
10. Process of farmer's participation and their reaction : Group discussion and positive reaction by the farmers participation

4.D1. Results of Technologies Refined -Nil

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2015-16

S. No.	Category	Farming Situation	Season and Year	Crop	Variety / breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
	Oilseeds													
1.		Rainfed	Kharif 2015	Groundnut	KCG-6	-	HYV	Demonstration of KCG-6 Groundnut Variety	3	3	1	3	4	
	Cereals													
2.	Millets	Rainfed	Kharif-2015	Ragi	ML-365		Drought Mitigation	Management of Soil Surface Crust in Red Soils	5	5	3	7	10	
3.		-	Rabi 2015	Ragi	ML-365		PHT	Branding and Labeling of value added products from Ragi	2 Groups	2 Groups	-	2	2	
4.	Pulses	Rainfed	Kharif-2015	Redgram	BRG-5		ICM	Enhancement of Pigeon pea yield through introduction of BRG-5	10	10	10	15	25	
5.	Vegetables	Irrigated	Kharif -2015	Tomato		Arka Rakshak F hybrid	IDM	Introduction of Arka Rakshak F1 hybrid in Tomato	2	2	1	4	5	
6.		Irrigated	Rabi-2015	Tomato		Pvt. Hybrid	ICM	Use of Polythene mulch in Tomato	1	1	1	2	3	
7.		Irrigated	Late Kharif 2015	Onion	Arka-Kalyan		ICM	Integrated crop Management in Onion	5	5	3	7	10	
8.		Irrigated	Kharif, 2015	Pomegranate	Bhagwa		ICM	Integrated Crop Management in	5	5	3	7	10	

								Pomegranate						
9.		Irrigated	Late Kharif, 2015	Banana	G-9		ICM	Demonstration of High density planting of Banana	1	1	1	2	3	
10.	Fruits		Kharif 2015				IPM	Management of Mango Stem Borer by Sealer cum Healer	100 trees	100 trees	-	5	5	
11.				Mango			Drudgery Reduction & PHT	Improved practices of production and post - harvest in Mango	10	2 Groups		2	2	
12.	Flowers	Irrigated	Kharif 2015	China Aster	Arka Adya	-	ICM	Demonstartion of China Aster variety Arka Adya	1	1	1	4	5	
13.	Medicinal and aromatic	Irrigated	Kharif 2015	Betelvine	Local	-	INM	Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine	2	2	2	8	10	

5.A. 1. Soil fertility status of FLDs plots during 2015-16

S. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1.	Oilseeds	Rainfed	Kharif 2015	Ground nut	KCG-6	-	HYV	Demonstration of KCG-6 Groundnut Variety	Kharif-2015	M	M	M	Ragi
2.	Millets	Rainfed	Kharif-2015	Ragi	ML-365		Drought Mitigation	Management of Soil Surface Crust in Red Soils	Kharif-2015	L	L	M	Ragi

3.		-	Rabi 2015	Ragi	ML-365		PHT	Branding and Labelling of value added products from Ragi	Rabi 2015	-	-	-	-
4.	Pulses	Rainfed	Kharif-2015	Redgram	BGR-5		ICM	Enhancement of Pigeon pea yield through introduction of BRG-5	Kharif-2015	M	M	H	-
5.	Vegetables	Irrigated	Kharif-2015	Tomato		Arka Rakshak F1 hybrid	IDM	Introduction of Arka Rakshak F1 hybrid in Tomato	Kharif-2015	M	M	M	Brinjal
6.		Irrigated	Rabi-2015	Tomato		Pvt. Hybrid	ICM	Use of Polythene mulch in Tomato	Rabi-2015	M	M	L	Frenchbean
7.		Irrigated	Late Kharif 2015	Onion	Arka-Kalyan		ICM	Integrated crop Management in Onion	Late Kharif 2015	M	M	H	-
8.	Fruits	Irrigated	Kharif, 2015	Pomegranate	Bhagwa		ICM	Integrated Crop Management in Pomegranate	Kharif, 2015	L	L	M	-
9.		Irrigated	Late Kharif, 2015	Banana	G-9		ICM	Demonstration of High density planting of Banana	Late Kharif, 2015	M	H	H	Ragi
10.			Kharif 2015	Mango			IPM	Management of Mango Stem Borer by Sealer cum Healer	Kharif, 2015	M	M	H	-
11.			Summer 2016	Mango			Drudgery Reduction & PHT	Improved practices of production and post - harvest in	Summer, 2016	-	-	-	-

								Mango					
12.	Flowers	Irrigated	Kharif 2015	China Aster	Arka Adya	-	ICM	Demonstartion of China Aster variety Arka Adya	Kharif 2015	M	H	M	Ragi
13.	Medicinal and aromatic	Irrigated	Kharif 2015	Betelvine	Local	-	INM	Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine	Kharif 2015	H	H	H	-

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the Technology Demonstrated	Variety	Hybrid	Farming situation	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds	Demonstration of KCG-6 Groundnut Variety	KCG-6	-	Rainfed	4	3	14.63	10.6	13.26	11.18	18.60	32,407	66,313	33,906	2.06	30,541	46,419	15,878	1.53
Millets	Management of Soil Surface Crust in Red Soils	ML-365		Rainfed	10	5	33	26	29.8	22.75	30.9	25,950	47,680	21,730	1.8	22,400	36,300	13,920	1.6

	Branding and Labelling of value added products from Ragi	ML-365		Rainfed	2 GRoups	--	-	-	-	-	-	38,500	39,000	20,500	1.5	25,000	30,000	5,000	1.2
Pulses	Enhancement of Pigeon pea yield through introduction of BRG-5	BRG-5		Rainfed	25	10	12.36	7.9	11.68	8.18	42.78	46,726	1,16,815	70,089	2.49	40,885	8,1771	40,885	2
Vegetables	Introduction of Arka Rakshak F1 hybrid in Tomato		Arka Rakshak F1 hybrid	Irrigated	5	2	292	263	276.2	18.36	33.52	44,084	1,65,736	1,21,652	3.75	46,570	1,10,160	63,590	2.36
	Use of Polythene mulch in Tomato		Pvt Hybrid	Irrigated	3	1	752	742	746	652	14.4	82,850	3,35,700	2,52,850	4.05	73,950	2,60,800	1,86,850	3.5
	Integrated crop Management in Onion	Arka Kalyan		Rainfed	10	5	317.5	167.5	253.4	177.4	42.84	96,560	2,53,400	1,56,840	2.72	96,560	1,77,380	80,820	1.91
Fruits	Integrated Crop Management in Pomegranate	Bhagwa		Irrigated	10	5	140	115	125	95	31.5	1,75,500	10,20,500	8,45,000	5.8	1,45,900	7,50,500	6,04,600	5.1

	Demonstration of High density planting of Banana	G-9		Irrigated	3	1	Ongoing												
	Management of Mango Stem Borer by Sealer cum Healer	Alphonso		Rainfed	5	100 trees	Ongoing												
	Improved practices of production and post - harvest in Mango	Alphonso		Rainfed	2 Groups	10	Ongoing												
Flowers	Demonstartion of China Aster variety Arka Adya	Arka Adya		Irrigated	2	1	4.7	4.3	4.5	3.2	40.6	35,275	1,35,000	99,725	3.83	30,400	96,000	65,600	3.14
Medicinal and aromatic	Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine	Local		Irrigated	10	2	3 lakhs	2.8 lakhs	2.9 lakhs	2.4 lakhs	20.8	38,460	72,500	34,040	1.9	36,500	48,000	11,500	1.3

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

	Data on other parameters in relation to technology demonstrated		
Title	**Parameter with unit**	**Demo**	**Check**
Demonstration of KCG-6 Groundnut Variety	Foliar Disease Incidence-%	15.25	23
Management of Soil Surface Crust in Red Soils	Bulk Density of Soil-Kg/m3	1.62	1.73
Branding and Labeling of value added products from Ragi	-	-	-
Enhancement of Pigeon pea yield through introduction of BRG-5	Plant Height-cm	180	173
Introduction of Arka Rakshak F1 hybrid in Tomato	Bacterial Wilt-%	9.62	36.66
Use of Polythene mulch in Tomato	Number of Fruits	46.6	37.3
Integrated crop Management in Onion	Bulb weight-gram	99.5	92.1
Integrated Nutrient Management in Pomegranate	Bacterial blight-%	9.6	22.5
Demonstration of High density planting of Banana	Plant Height-Feet	2.2	3.6
Management of Mango Stem Borer by Sealer cum Healer	Total length of Healed stem-cm	10.8	28(stem damaged length)
Improved practices of production and post - harvest in Mango	-	-	-
Demonstration of China Aster variety Arka Adya	Flowers per plant-Number	50	37.5
Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine	Disease incidence-%	26.07	28.4

5.B.2. Livestock and related enterprises -Nil

5.B.3. Fisheries -Nil
5.B.4. Other enterprises -Nil
5.B.5. Farm implements and machinery-Nil

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

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	5	520	-
2	Farmers Training	44	1091	-
3	Media coverage	8	-	-
4	Training for extension functionaries	4	98	-
5	Others (Please specify)	-		-

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Tomato	Use of Polythene mulch in tomato	Private hybrid	5	2	292	263	276.2	18.36	33.52	44,084	1,65,736	1,21,652	3.75	46,570	1,10,160	63,590	2.36
	Demonstration of Arka Rakshak F1 resistant to Leaf curl, Bacterial Wilt and Early leaf Blight in Tomato	Arka Rakshak F1 Hybrid	3	1	752	742	746	652	14.4	82,850	3,35,700	2,52,850	4.05	73,950	2,60,800	1,86,850	3.5
Total			**8**	**3**	**1044**	**1005**	**1022.2**	**670.36**	**47.92**	**126934**	**501436**	**374502**	**7.8**	**120520**	**370960**	**250440**	**5.86**

PART VII. TRAINING

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Integrated Farming	1	43	0	43	2	0	2	45	0	45
Soil and Water Conservation	1	17	0	17	0	0	0	17	0	17
Integrated Nutrient Management	1	0	12	12	0	0	0	0	12	12
Production of organic inputs	1	29	0	29	3	0	3	32	0	32
Horticulture										
a) Vegetable Crops										
Others (pl.specify)-Organic farming in Horticulture Crops	4	56	8	64	3	0	3	59	8	67
b) Fruits										
Training and Pruning	1	17	0	17	2	0	2	19	0	19
Cultivation of Fruit	4	69	33	102	5	13	18	74	46	120
Management of young plants/orchards	1	13	16	29	1	5	6	14	21	35
c) Ornamental Plants										
d) Plantation crops										
Production and Management technology	2	29	0	29	3	0	3	32	0	32
e) Tuber crops										
f) Spices										
g) Medicinal and Aromatic Plants										
Soil Health and Fertility Management										
Soil fertility management	1	16	0	16	6	0	6	22	0	22
Soil and water testing	4	59	1	60	4	0	4	63	1	64
Livestock Production and Management										
Animal Nutrition Management	1	92	2	94	6	1	7	98	3	101
Home Science/Women empowerment										
Value addition	2	5	45	50	1	16	17	6	61	67
Women empowerment	1	0	28	28	0	3	3	0	31	31
Production of Inputs at site										
Seed Production	1	37	0	37	3	0	3	40	0	40
Mushroom production	2	26	16	42	5	2	7	31	18	49
Others (pl.specify)-Methodologies for Food grain storage in CWC	1	31	5	36	2	0	2	33	5	38
TOTAL	**29**	**539**	**166**	**705**	**46**	**40**	**86**	**585**	**206**	**791**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Integrated Crop Management	1	14	0	14	1	0	1	15	0	15
Others (pl.specify) Organic Farming	5	37	112	149	6	11	17	43	123	166
Horticulture										
a) Vegetable Crops										
Off-season vegetables	1	15	9	24	2	1	3	17	10	27
Protective cultivation	1	27	0	27	3	0	3	30	0	30
b) Fruits										
Cultivation of Fruit	3	64	51	115	5	4	9	69	55	124
Others (pl.specify) –Dry Land Horticulture	2	71	15	86	4	1	5	75	16	91
c) Ornamental Plants										
Others (pl.specify) commercial floriculture	1	16	13	29	4	2	6	20	15	35
d) Plantation crops										
Production and Management technology	1	39	0	39	3	0	3	42	0	42
Soil Health and Fertility Management										
Soil fertility management	1	43	0	43	2	0	2	45	0	45
Integrated water management	1	17	0	17	2	0	2	19	0	19
Soil and water testing	10	274	86	360	15	13	28	289	99	388
Livestock Production & Management										
Others (pl.specify)Sheep and Goat Rearing	1	18	4	22	2	1	3	20	5	25
Home Science/Women empowerment										
Value addition	1	0	14	14	0	0	0	0	14	14
Post Harvest Technology	1	22	2	24	2	0	2	24	2	26
Plant Protection										
Integrated Pest Management	1	23	0	23	2	0	2	25	0	25
Integrated Disease Management	5	72	65	137	6	6	12	78	71	149
Bio-control of pests and diseases	1	24	43	67	2	1	3	26	44	70
TOTAL	**37**	**776**	**414**	**1190**	**61**	**40**	**101**	**837**	**454**	**1291**

7.C.Training for Rural Youths including sponsored training programmes (on campus)-Nil

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
Any other (pl. specify)-Terrace Gardening	1	26	37	63	2	5	7	28	42	70
Nutrition Gardening	2	0	31	31	0	8	8	0	39	39
TOTAL	**3**	**26**	**68**	**94**	**2**	**13**	**15**	**28**	**81**	**109**

7.E.Training programmes for Extension Personnel including sponsored training programmes (on campus)-Nil

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

7.G. Sponsored training programmes conducted-Nil

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

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	5	162	38	200	22	6	28	21	4	25
Kisan Mela	4	2550	250	2800	150	50	200	590	202	792
Exhibition	6	16500	1200	17700	564	200	764	1960	1010	2970
Film Show	3	76	24	100	18	9	27	12	4	16
Group meetings	1	22	3	25	6	3	9	3	1	4
Lectures delivered as resource persons	17	750	150	900	26	5	31	7	4	11
Newspaper coverage	4	-	-	-	-	-	-	-	-	-
Radio talks	5	-	-	-	-	-	-	-	-	-
TV talks	4	-	-	-	-	-	-	-	-	-
Popular articles										
Extension Literature	8	-	-	-	-	-	-	-	-	-
Advisory Services	235	750	360	1010	141	90	231	98	52	140
Farmers visit to KVK	196	1209	150	1359	38	12	50	85	22	107
Diagnostic visits	44	65	45	110	22	4	26	5	1	6
Exposure visits	2	20	14	34	12	4	16	3	1	4
Soil health Camp	6	182	28	210	22	11	33	5	1	6
Self Help Group Conveners meetings	1	0	1250	1250	0	250	250	15	3	18
Celebration of important days (International Women Day)	1	3	27	30	0	2	2	0	2	2
Any Other (Specify) Special day celebrations	6	461	139	600	31	10	41	355	50	405
Total	**548**	**22750**	**3678**	**26428**	**1052**	**656**	**1708**	**3159**	**1357**	**4516**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (Kg)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Finger millet	ML 365		944	37,760	27
	Navane	Local variety		17	1,700	0
Oilseeds	Ground nut	KCG-6		400	20,000	0
Pulses	Red gram	BRG-5		120	18,000	0
Vegetable crops	Tomato	Arka Meghali		10	20,000	6
Vegetable crops	Okra	Arka Anamika		52	20,800	51
Vegetable crops	Onion	Arka Kalyan		200	2,40,000	70
Vegetable crops	Onion	Bhema Shakti		20	24,000	7
Vegetable crops	Radish	Arka Nishant		6	2,400	26
Vegetable crops	Cowpea	Arka Garima		62	12,400	18
Fruit crops	Papaya	Arka Prabhat		1	1,00,000	2
Spices	Vegetable Seed Kits	10 different vegetable seeds		5000 No,s	5,00,000	649
Total					**9,97,060**	**856**

9.B. Production of planting materials by the KVKs

Crop category	**Name of the crop**	**Variety**	**Hybrid**	**No.**	**Value (Rs.)**	**Number of farmers to whom provided**
Plantation	Areca nut	Hirehalli tall		15,000	3,00,000	55
		Sprouts		550	2,750	15
	Coconut	Arsikere tall		200	12,000	20
Fruits	Mango	Alphanso, Mallika, Dashehari		110	4,400	15
	Guava	AS, Pink flesh, L-49		100	4,000	30
	Amla	NA-4,5,7		260	10,400	30
	Lime	Seedless		100	4,000	55
	Pomelo	Devanahalli		463	9,260	80
	Lime	Kazi Lime		725	14,500	85
	Pomegranate	Bhagwa		1,468	58,720	15
	Rose Apple	-		271	5,420	40
	Sapota	Cricket Ball		175	7,000	124
	Tamarind	PKM-1		125	5,000	25
	Jamun	Gokak		72	2,880	10
	Fig	Poona		73	2,920	5
	Custard apple	Balanagar		72	2,880	6
	Others seedlings			152	1,520	37
	Fruit crop Scions			6,200	12,400	2
Flower Crops	China Aster	-		1,20,000	40,000	15
Total				**26,191**	**4,63,050**	**664**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers	Banana special	8,510	12,76,500	1,650
	Vegetable Special	5,418	8,12,700	1,290
	Mango Special	3,228	4,84,200	868
	Citrus Special	1,162	17,43,000	432
Bio-pesticide	Neem Soap	2,996	4,49,400	1,178
	Pongamia Soap	1,659	2,07,375	868
	Sealer cum Healer	458	68,700	156
Bio-fungicide	Arka Microbial consortium	2,367	1,36,700	680
Bio Agents	Mango fruit fly traps & lures-Nos.	584	58,400	78
Others	Amla Juice -Ltrs	310	40,300	168
	Amla Candy	280	84,000	420
	Mushroom Spawn	350	28,000	212
	Ragi Malt	100	20,000	54
Total			**54,09,275**	**8,054**

9.D. Production of livestock materials-Nil

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

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

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)
April –June 2015 100 copies
July-Sept 2015 100 copies

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	**Papers in research journals:** 1. Assessment of On-farm employment generation through natural resource conservation activities in the semi-arid region, The Andhra Agric. Journal, 61(4):921-926. 2. Decomposition analysis of output change under watershed management interventions in semi-arid regions, Indian Journal of Soil Conservation, Vol.43, No.1, pp: 110-114. 3. Suitable Chickpea cultivars for rainfed situations in black soils of south India. Legume Research, 38(2) 2015: 229-234. 4. Effect of Arka Microbial Consortium and Seed Pro Growth Promoter on Soil Health and Productivity of Tomato Crop, International	Biswajit Mondal, R.N. Adhikari, S.L.Patil, A. Raizada, M.Prabhavathi, D.Ramajayam, **N.Loganandhan** Biswajit Mondal, **N.Loganandhan**, K.K.Reddy and K.Channabasappa, S.L.Patil. P.K.Mishra, **N.Loganandhan**, S,K.N.Math, S.M.Manikatti and B.N.Seshadri. 2015. B.Hanumanthe Gowda, Kumara N, P.R.Ramesh, N.Loganandhan,	6

	Journal on Agricultural Sciences, July-December 2015, 6 (2): 356-359. 5. Effect of Black polythene Mulches on Growth and Yield of green chilli (Capsicum annuum) in Tumakuru District, Karnataka, Nature Environment and Pollution Technology - Accepted (P-ISSN 0972-6268; E-ISSN 2395-3454).- Accepted for publication – Paper No.B-3174, by Letter Dtd.25-04-15. 6. Evaluation of Chickpea varieties under compartmental bunding in rainfed situation, Journal Legume Research - Accepted for publication by Letter No.ARCC/LR-3496, Dtd.19-12-2015.	Kumara N., N.Loganandhan, Somashekhar, Hanumanthe Gowda, B. S.L.Patil, N.Loganandhan.	
Technical reports	IIHR Annual Report 2015-16 SAC Report NICRA Action Plan Report Action Plan Report	KVK Staff	4
News letters	ICAR News letter IIHR News Letter KVK News letter CRIDA News letter		4
Technical bulletins	1. Jack fruit….A Versatile Fruit: Technical bulletin Published by Indian Institute of Horticultural Research, Bangalore Pp:87. 2. Technical Bulletin on Coconut – A Kalpavriksha (Kannada) - Technical Bulletin, KVK (ICAR-IIHR), Hirehalli, Tumakuru, Karnataka, Pp 64. 3. Souvenir on Jackfruit Diversity Fair – 2015, held on 27th June, 2015, at CHES/KVK, Hirehalli, Tumakuru, Karnataka, Pp:42 4. Processing and Value addition in Jackfruit – Technical Bulletin (Kannada), KVK (ICAR-IIHR), Hirehalli, Tumakuru, Karnataka, Pp:8 5. Nutritional Garden for Food Security – Technical Bulletin (Kannada), KVK (ICAR-IIHR), Hirehalli, Tumakuru, Karnataka, Pp:8	Karunakaran.G, Loganadhan.N, Hegde.M.R, Senthil kumar.M, Jagadish. K.N, Ramesh. P.R, Prahanth.J.M, Hanumanthe Gowda.B, Radha R.Banakar, Somashekhar, Shashidhar.K.N and Srinivas Reddy.K.M. Prashanth J.M., Somashekhar, Radha R. Banakar, Loganandhan N, Hanumanthe Gowda, B., Ramesh P.R., Jagadish K.N., Karunakaran, G., Narayanaswamy B., Hegde M.R. G.Karunakaran, N.Loganandhan, M.Senthilkumar, P.R.Ramesh, K.N. Jagadish, J.M.Prasanth, B.Hanumanthe gowda, Radha R.Banakar, Somashekhar Radha R. Banakar, Somashekhar, N.Loganandhan Radha R. Banakar, Somashekhar, N.Loganandhan and Karunakaran, G.	5
Popular articles	1. Food for men and Fodder for animals - Chaya (Kannada), In: Negila Miditha, Monthly Periodical in Kannada, UAHS, Shivamoga, June 2015 /pp: 24-25. 2. Dryland Horticulture (Kannada), In: Sharath Krishi Magazine, Bengaluru, June 2015 /pp:28-29. 3. Climate forecast based Agriculture (Kannada),	Ramesha, M.N., Patil, S.L., Loganandhan, N., J.M.Prashanth, K.N.Shashidhara and N.Loganandhan, J.M.Prashanth, K.N.Shashidhara	7

	In: Sharath Krishi Magazine, Bengaluru, June 2015 /32-33. 4. Organic Farming (Kannada), In: Sharath Krishi Magazine, Bengaluru, July 2015 pp:23-25. 5. Short duration finger millet varieties for delayed monsoon / deficit rainfall district in south interior Karnataka, In: Smart Practices & Technologies for Climate Resilient Agriculture. pp:20-21 6. Individual farm ponds for improving livelihoods of small farmers, In: Smart Practices & Technologies for Climate Resilient Agriculture. pp:36-38. 7. Custodians of Jackfruit diversity: An overview Somashekhar, 2015, Souvenir on Jackfruit Diversity Fair – 2015, held on 27th June, 2015, at CHES/KVK, Hirehalli, Tumakuru, Karnataka, pp:41-42.	and N.Loganandhan, J.M.Prashanth, K.N.Shashidhara and N.Loganandhan N.Loganandhan. N.Loganandhan. G.Karunakaran, N.Loganandhan, M.Senthilkumar, P.R.Ramesh, K.N. Jagadish, J.M.Prasanth, B.Hanumanthe gowda, Radha R.Banakar	
Extension literature	1. Integrated Management of Mango Fruit Fly, KVK (ICAR-IIHR), Hirehalli, Tumakuru, Karnataka. 2. Foliar application Arka Citrus Special for balanced nutrition and higher yield in Citrus crop, KVK (ICAR-IIHR), Hirehalli, Tumakuru, Karnataka. 3. Sealer cum Healer 4. Drought Tolerant Ragi ML-365 5. Onion Seed Production 6. Production of Arka cocopeat 7. Arka Mango Special 8. Arka Banana Special 9. Banana bunch feeding	- P.R.Ramesh, Hanumanthe Gowda, B., Shashidhara K.N., Shivananda, P.N., Prashanth J.M., Loganandhan, N. P.R.Ramesh, Hanumanthe Gowda, B., Shashidhara K.N., Shivananda, P.N., Prashanth J.M., Loganandhan, N. BHGowda, PRRamesh, KNShashidhara PRRamesh Somashekhar PRRamesh PRRamesh, BHGowda JMPrashanth, KNShashidhara	9
TOTAL			**35**

10.B. Details of Electronic Media Produced

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

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

Success stories

Innovative Vegetable Women Farmer – a Success Story through adoption of new Technologies

Mrs. Shashikala .T
W/o. Ranganath. P.D.
Pemananahalli Village,
Udigere Hobli,
Tumakuru – 572104,
Karnataka.
Mobile: 7259488516

Smt. Shashikala is an innovative vegetable farmer from Pemmanahalli village of Udigere Hobli, Tumakuru Taluk and Tumakuru District, Karnataka. She has completed her S.S.L.C. and currently actively involved in the development of agriculture, horticulture and animal husbandry. Smt. Shashikala has got a keen interest in horticulture related activities and has developed good linkages with different public development departments like Indian Institute of Horticultural Research (IIHR), Bengaluru, Krishi Vigyan Kendra (KVK), Hirehalli, Tumakuru, and Karnataka State Horticulture Department (KSHD). She is motivating women farmer members of various self help groups to adopt new technologies of IIHR. She is having a landholding of 4 acres out of which 1.5 acres is irrigated.

She is the member of a Sri Vinayaka Shree Shakthi - Self Help Group (SHG) which is having 20 members. The group meets once in every 15 days. The SHG group activity includes agriculture and horticulture planning, organic farming, animal husbandry and vermi-composting. She started growing vegetables like french beans, tomato, peas, brinjal, chilli and green leafy vegetables since 2010. Earlier they used to grow field crops like ragi, field bean, red gram and jowar.

Crops and varieties: Smt. Shashikala is growing improved peas variety of IIHR (Arka Ajit) and Magadi local. Arka Ajit variety has been grown in Pemmanahalli at her farm for the last two years. The yield details are given below in Table 1.

Table. Average 3 season performance of improved and local varieties of peas (2009-12)

Sl. No.	*Varieties*	*Yield (t/ha)*
1.	Arka Ajit*	16.5 t/ha
2.	Magadi Local	17.4 t/ha

* Arka Ajit is resistance to powdery mildew from which cost on chemical fungicides was reduced to farmer.

Similarly, the yield of French beans, which she has grown for three consequent seasons, ranged from 13.5 – 18.5 t/ha and the productivity is highest among nearby villages. She found Arka Suvidha variety better being stringless variety, fetching more price in the market. Traders found it to be suitable for local and Bengaluru markets. With Arka Anoop, she could get up to 17 t/ha. The variety is resistant to rust. She got a market price of about Rs.11/kg for Arka Suvidha compared to Arka Anoop and Arka Komal (where she fetched Rs.10/kg). She now prefers to grow Arka Anoop and Arka Suvidha because of their additional qualities and high yield. According to her, Arka Anoop and Arka Suvidha are having good cooking quality as well. Earlier she is used to grow in same land ragi, jowar, field bean and red gram, in which she used to realize an average net returns of Rs. 20,000/- per acre. Now by switching over to short duration vegetable crops she is able to earn a net return of Rs. 60,000/- per acre.

Interaction with Research Institutes: She is in constant touch with scientists from IIHR, Bengaluru and KVK, Hirehalli for her technological needs. The seeds of improved varieties were provided for demonstrations by the IIHR since 2006. She has now become an expert in management of french beans production including pest and disease management. Smt. Shashikala being hardworking and innovative farmer, she has been identified as a techno-agent for dissemination of technologies in horticulture to other farmer of the area. Her services are also being used by the KVK to educate other farmers on improved vegetable cultivation.

Market Integration: In contrast to her visits to Bengaluru market earlier, now the vendors come to her place and purchase the produces. She has also motivated other farmers in her own and neighboring villages and about 15 farmers are now growing improved varieties of french beans.

Use of Organic Formulations: In case of peas and tomato, she is now using *'Panchagavya'*, an organic formulation during the flowering stage. She has found it effective in controlling flower drop. *Panchagavya* is made with 5 kg of cow dung, 10 litre of cow urine, 1 litre of curd, 1 litre of milk, 1 kg of ghee. After keeping for 15 days, the solution is diluted with water in 1:10 ratio and sprayed.

Use of Vegetable Special: During her visit to IIHR, she came to know about the vegetable special for the tomato, beans other vegetables. The recommended dosages of vegetable special for french beans is 2 g/l. She is now using vegetable special regularly, as she has noticed that the fruit quality, diseases resistance of the crops grown have improved.

Use of Bio-fertilizer & Bio-pesticides: She has started using bio-fertilizers like Phosphate Solubilizing Bacteria (PSB), *Azospirillum & Azotobacter* for enriching the farm yard manure. She is also using bio-pesticides (*Pseudomonas fluoresces, Paecilomyces lilacinus & Pochonia chlamydospria*) for bio-controlling of pest and diseases.

Innovativeness: Smt. Shashikala, through her continuous training and interaction with scientists, is able to identify the insect pests of French beans, including stem fly, and is better in their management practices. After seeing the potential of the new variety, she has taken up seed production in the current year. The seeds so generated were supplied to the neighboring farmers. With her intervention they have started to grow different vegetable crops in a season in the village and as a result they are realizing better price in the market. She is convinced about the group approach in popularizing technologies among the farmers of her village. She has organized numerous group meetings with help of scientists from IIHR and KVK, Hirehalli. The meeting on topic like seed production in French bean, Integrated pest and disease management were organized, in which 12-15 groups of farmers participated. The idea was to have good exchange of ideas, discussing pros and cons of technologies etc. She is convinced of bringing agricultural and horticultural development in the village through group approach. By realizing the importance of growing vegetable crops she is diversifying to other horticultural crops like tomato, chilli, leafy vegetables and banana. In all these crops she is following the recommended practices of IIHR, by interacting with the KVK scientists, and Division of Extension and Training.

New varieties:

She has started growing other improved varieties and hybrids like Arka Anand (a hybrid green long Brinjal from IIHR, resistant to bacterial wilt), Chilli (Arka Meghana and Arka Shwetha), Amaranthus (Arka Suguna) and Palak (Arka Anupama). She is preserving seeds of Magadi local peas at Pemanahalli since 40 years and earning good remuneration by selling seeds and pods. Her success story on cultivation of Magadi local peas was documented in DD Chandana and Adoption of IIHR technology for self sustainable in agriculture. She is also the recipient of Young Farm Women award at UAS, Bengaluru during International Krishi Mela 2013. During November 2014 she was identified under young farm women category by UAS, Bangalore and selected for Farmer Exposure Visit - All India Tour sponsored by Govt. of Karnataka. By this she gained knowledge in different agriculture and horticulture practices. Now she is a Champion farmer for KVK Hirehalli. The key to her success lies in her eagerness to learn and grasp new technologies quickly and adopt them immediately in her field, a prime quality of an innovator.

Friends of Coconut Tree - A boon to the farmers of Tumakuru district and succeed in giving professional coconut tree climbers

Mr.Gopal Gowda,
K. Bevenahalli,
Turuvakere taluk,
Tumakuru district
Moblie Number : 7259724723

Coconut Palm is an important cash crop in the Tumakuru district and it is being cultivated in an area of about 1, 32,587 ha with a production of 20,912 lakh nuts. Coconut cultivation and allied activities provided livelihood security to the many farmers of Tumakuru district. For harvesting the nuts, removing the dried fronds and for spraying and applying insecticides on the crown, it requires skilled labourers to climb manually up the tree. Skilled and trained coconut tree climbers have become scarce and farmers are finding it difficult to harvest the nuts timely.

The traditional method of coconut climbing is cumbersome, risky and less effective, because of high energy consuming process. The younger generations are not showing interest to engage them in this activity. The aged people alone are doing traditional harvest. Often these aged people fall from coconut palms leading to permanent handicap even death occurs. In traditional methods farmers are harvesting an average

of 30-40 palms per day. The labourers harvesting the coconut in traditional way are demanding Rs.20 to 30 per tree and they are attending harvesting on an average of 2-3 months interval. This has led to yield reduction due to improper maintenance of coconut palms and loss by theft of fallen coconuts.

In this connection, Krishi Vigyan Kendra, Hirehalli conducted various trainings and demonstrations for a period of 6 days which was sponsored by the Coconut Development Board, Hulimavu, Bengaluru and introduced the mechanical coconut harvesting machine for rural youth of the district to create awareness and regular practicing of climbing by master trainers. Besides coconut climbing, they were trained on all aspects of coconut cultivation like seed nut selection and procurement, safe handling of seed nuts and tender nuts, coconut nursery and its management, planting and aftercare, tender and mature nut identification, identification of pest and disease of coconut and their management etc. A total of four trainings and demonstrations were conducted. A total number of 80 rural youths were participated in the programmes from the district. The best part of the `coconut-climber' is that even non-professional climbers can operate it, making it a boon for farmers.

Successful outcome:

Sri Gopal Gowda, is unemployed residing at K. Bevenahalli ,Turuvakere taluk Tumakuru district attended the Friends of Coconut training programme at KVK Hirehalli. Soon after he completed the training programme successfully, he started coconut plucking as his career and goes to work on his own two wheeler along with the coconut climbing machine received during the training programme. Sri. Gopal Gowda climbs the palms for coconut harvesting and he also cleans the crown of the coconut palms, farmers engaging him are more satisfied. He also provides the information on Pest and disease management and fertilizer aspects for palms. On an average he climbs nearly 70 to 90 palms per day and approximately 750 palms per month. He is charging Rs.20-25 /tree depending on the total number of coconut trees available and also based on the height of the tree. He is having cell phone and communicating the programme to the customer in advance in the district and other adjacent districts also. He is earning Rs 1500-2000/day and the total revenue was Rs. 15,000 per month and leading a happy life. The labour scarcity for harvest of coconuts thereby is in a declining trend in the taluk.

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

-Nil-

10.E. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Groundnut	Tying of old Clothes, Installation of scare crow, Installation of traditional bells made up of old steel plates, Application of phorate all along the borders	Management of Wild boar
2	Coconut	Fixing of old oil tin plate all around over middle of trunk.	To avoid the monkey and squirrels

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

1. Identification of courses for farmers/farm women

- PRA technique and need analysis through individual & group discussion
- As per the suggestions and guidelines of members of SAC
- Discussion with the scientist of IIHR Bengaluru
- Discussion with officials of line department

2. Rural Youth

- Survey and discussion
- Feedback from rural youths
- Periodical field visits

3. In service personnel

- Discussion with District and taluk level officers to know the areas of interest/choice of extension workers based on field problems
- Collaborative activities, meetings and discussions with line departments.
- SAC interactions
- Diagnostic visits

10.G. Field activities

i. Number of villages adopted : 20
ii. No. of farm families selected : 96
iii. No. of survey/PRA conducted : 05

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : **Established under NHM Scheme**

1. Year of establishment : 19.4.2014
2. List of equipments purchased with amount :

Sl. No.	Name of Equipments	Qty	Amount (Rs.)
1	Spectrophotometer with accessories	1	1,81,260
2	Flame photometer	1	53,238
3	Analytical balance	1	28,625
4	Nitrogen Analyzer (Kjeldahl digestion and distillation) with spare parts	1	1,79,879
5	Shaker	1	45,800

6	Refrigerator	1	40,200
7	Oven	1	60,456
8	Hot plate	1	18,893
9	Digestion fume chamber	1	99,501
10	Atomic Absorption Spectrophotometer	1	10,00,000
11	Centrifuge	1	58,404
12	Glassware and miscellanies	-	99,279
13	Chemicals	-	1,34,465
Total			**20,00,00**0

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	2,492	2370	1560	62,300
Water Samples	1,677	1,668	1,217	83,350
Plant samples	122	51	51	12,200
Manure samples				
Others (specify)				
Total	**4,291**	**4,089**	**2,828**	**1,57,850**

Details of samples analyzed during the 2015-16:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1,869	1760	950	1,86,900
Water Samples	1,263	1260	809	63,150
Plant samples	10	8	8	1,000
Manure samples				
Others (specify)				
Total	3,142	3,028	1,767	2,51,050

10.I. Technology Week celebration during 2015-16 Yes/No, If Yes : No

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

PART XI. IMPACT

11.A. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Polymuch with drip Irrigation	40	40	2,50,000	2,85,000
Enhancement of Productivity of Finger millet by drought tolerant variety ML 365	60	80	19,500	36,500

11.B. Cases of large scale adoption
(Please furnish detailed information for each case)

-NIL-

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

- Infestation of Stem borer in Mango was a major problem in mango growing area and proper stem borer control technology measures were not followed because of the leasing practices among the farmers. The awareness created and demonstrated on use of Sealer cum Healer (IIHR technology) at the appropriate time and for effective control of stem borer at critical stage. Nearly 76 farmers adopted the technology and also farmers realized that it is a low cost technology which is effective to control stem borer in mango.

- Farmers have realized the importance of ICM technology (Vegetables) and only 35% of the IPM components are being voluntarily used by the farmers.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
State Department of Horticulture	Trainings, FLD, Joint Diagnostic Survey
State Department of Agriculture	Trainings, FLD, Joint Diagnostic Survey
Watershed Department	Training and Collaborative Activities
Department of Animal Husbandry and Fisheries	Trainings and Technical Information
Department of Women and Child Development	Trainings
BAIF NGO, Tiptur	Trainings and Technical Information
ORDER NGO, Tumakuru	Trainings, FLD's and Technical Information
AWARE NGO, Tumakuru	Trainings
APART NGO Tumakuru	Organic Farming and Group Approach
MOTHER NGO Tumakuru	Seed Village Concept
DHAN Foundation	Seed Village Concept , FPO
UAS, Bengaluru	Trainings and FLDs
UAS, Dharwad	Trainings and FLDs
UHS, Bagalkote	Trainings and FLDs
Veterinary University,Bidar	Trainings and FLDs

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. In Lakhs)
Technology demonstration component of NICRA	Demonstration of Interventions	January 2011	CRIDA, Hyderabad	83.79
Establishment Model Nursery at KVK Hirehalli	Production of quality planting material	March 2013	NHM	25
Participatory Vegetable Seed Production and Distribution System	Participatory Vegetable Seed Production in farmers field	March 2013	RKVY, GOK	40
Krishi Bhagya Scheme	Construction of Farm Pond	January 2015	Govt. of Karnataka	2.5

12.C. Details of linkage with ATMA

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

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
1	Model Nursery	Project	25	25	-

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

12.F. Details of linkage with RKVY

Sl. No.	Programmes	Nature of linkage	Funds received if any Rs. Lakhs	Expenditure during the reporting period in Rs. Lakhs	Remarks
1	Participatory Vegetable Seed Production and distribution system under RKVY scheme	Quality seed production	40	30	

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2015	2	1297	1
May	1	1338	0
June	10	1340	1
July	7	1391	1
August	3	1376	2
September	-	-	-
October	-	-	-
November	-	-	-
December	1	1355	1
January 2016	1	1371	0
February	1	1357	1
March	-	-	-
Total for the year 2015-16	**26**	**10825**	**7**

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Biogas Unit	2015	-	-	-	1	24,500	-	-
2.	Farm Machinery Custom Hiring Center under Bhoosumruddhi	2016	-	-	-	1	40,00,000	-	-

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Ragi	5.6.2015	21.10.2015	0.4	ML-365	Seeds	944		37,760	
Navane	5.6.2015	11.10.2015	0.1	Local		17		1,700	
Redgram	4.8.2015	10.2.2016	0.4	BRG-5		120		18,000	
Oilseeds									
Groundnut	4.8.2015	10.12.2015	0.4	KCG-6	Seeds	400		20,000	
Spices & Plantation crops									
Areca nut	-	-	-	Hirehalli Tall	Seedlings	15,000		3,00,000	
					Sprouts	550		2,750	
Coconut	-	-	-	ArsikereTall	Seedlings	200		12,000	
Floriculture									
Fruits									
Mango	-	-	-	Alphanso, Mallika, Dashehari	Seedlings	110		4400	
Guava	-	-	-	AS, Pink flesh, L-49	Seedlings	100		4000	
Amla	-	-	-	NA-4,5,7	Seedlings	260		10400	
Lime	-	-	-	Seedless	Seedlings	100		4000	
Pomelo	-	-	-	Devanahalli	Seedlings	463		9260	
Lime	-	-	-	Kazi Lime	Seedlings	725		14500	
Pomegranate				Bhagwa	Seedlings	1,468		58720	
Vegetables -Seeds in Kg									
Tomato	12.9.2015	9.3.2016	0.4	Arka Meghali	Seeds	10		20000	
Okra	12.9.2015	5.3.2016	0.2	Arka Anamika	Seeds	52		20800	
Onion	5.6.2015	12.3.2016	0.2	Arka Kalyan	Seeds	200		240000	
Onion	5.6.2015	12.3.2016	0.2	Bhema Shakti	Seeds	20		24000	
Radish	12.9.2015	5.3.2016	0.2	Arka Nishant	Seeds	6		2400	
Cowpea	12.9.2015	2.3.2016	0.2	Arka	Seeds	62		12,400	

				Garima					
Vegetable Seed Kit	-	-	-	10 Varieties	Seeds	5,000		5,00,000	
Others (specify)Fruit crop seeds									
Papaya	5.6.2015	25.3.2016	0.2	Arka Prabhat	Seeds	1		1,00,000	

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

Sl. No.	Name of the Product	Qty-Kg	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Banana Special	8,510	-	12,76,500	
2.	Vegetable Special	5,418		8,12,700	
3.	Mango Special	3,228	-	4,84,200	
4.	Citrus Special	1,162	-	17,43,000	
5.	Neem Soap	2,996		4,49,400	
6.	Pongamia Soap	1,659	-	2,07,375	
7.	Sealer cum Healer	458		68,700	
8.	Arka Microbial Consortium	2,367	-	1,36,700	
9.	Mango fruit fly traps & lures	584-Nos.	-	58,400	
10.	**Others**				
11.	Amla Juice	310-ltrs		40,300	
12.	Amla Candy	280		84,000	
13.	Mushroom Spawn	357	-	28,000	
14.	Ragi Malt	100	-	20,000	

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

13.E. Utilization of hostel facilities

Accommodation available (No. of beds) : Yet to be Furnished

13.F. Database management

S.No	Database target	Database created
1.	Farmers Database	**Ongoing**
2.	Database for Technologies assessed and Refined	
3.	Frontline Demonstrations Database	
4.	Training Database	
5.	Database of Extension Programmes	
6.	Seeds and Planting Material Database	

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

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Central Bank of India	Hessaraghatta Bengaluru	3973	Current Account	185833018	560016024	CBIN 0283973
With KVK							

14.B. Utilization of KVK funds during the year 2015-16 (Rs. in Lakh)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	84,15,000		83,91,292
2	**Traveling allowances**	90,000		98,602
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,05,000		1,05,000
B	POL, repair of vehicles, tractor and equipments	1,25,000		1,25,307
C	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	50,000		50,000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	25,000		25,000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1,38,000		1,38,000
F	Frontline demonstration-NFSM	1,23,000		1,23,000
G	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	29,000		29,000
H	Training of extension functionaries	0		0
I	Maintenance of buildings	0		0
J	Establishment of Soil, Plant & Water Testing Laboratory	0		0
K	Library	5,000		5,000
L	*Extension Activities*	50,000		50,000
	TOTAL (A)	**91,55,000**	**91,54,468**	**91,40,201**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)		**0**	**0**	**0**
C. REVOLVING FUND		0	0	**45,01,515**
GRAND TOTAL (A+B+C)		**8879000**	**8879000**	**1,36,41,716**

14. C. Status of revolving fund (Rs. in Lakh) for the three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2013 to March 2014	1988575	3735246	3287560	2436261
April 2014 to March 2015	24,36,261	49,60,840	39,34,815	34,62,286
Apr 2015- Mar 2016	34,62,286	51,44,116	45,01,515	41,04,887

15. Details of HRD activities attended by KVK staff during 2015-16

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
N.Loganandhan	Sr. Scientist & Head	Farmers Producers Organization	KVK, Gadag	30th October 2015
		Conservation Agriculture	CRIDA, Hyderabad	18th -19th January 2016
K.N.Jagadish	SMS-Agril. Extension	Community Radio for Agriculture development	UAS Dharwad	14th -17th March 2016
Prashanth JM	SMS Horticulture	Productivity and profitability mechanism in coconut	CPCRI Kasargod	5-6th Feb 2016
		Community Radio for Agriculture development	UAS Dharwad	14th -17th March 2016
Shashidhara KN	Progm. Asst	Communication Skill development	UAS Bengaluru	14th -17th March 2016

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

- Smt B.Jayashree, MP., Dr. Sreenath Dixit , Director, ATARI Visited to KVK, Hirehalli on the occasion of Khariff Awareness Programme held on 7.8.2015.
- Dr. M.Anandaraj, Director, IIHR, Bengaluru Visited to KVK, Hirehalli on the occasion of Jai Kisan Jai Vigyan Programme held on 29.12.2015.
- Dr. B.R.Mamatha, IAS, CEO, ZP, Tumakuru visited to KVK Hirehalli on the occasion of Rabi Awareness Programme held on 23.1.2016.

- **SUMMARY FOR 2015-16**

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Crop Management	Areca nut -French bean	Assessment of Areca nut -French bean intercropping system for high soil fertility and higher income	03
	Mango-Redgram+Greengram	Assessment of Redgram:Greengram (1:4) as a intercrop in Mango orchard for climate resilient agriculture	03
Integrated Disease Management	Pomegranate	Evaluation of technology for management of Pomegranate wilt	03
Total			**9**

Summary of technologies assessed under livestock : NIL

Summary of technologies assessed under various enterprises : NIL

Summary of technologies assessed under home science : NIL

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops : NIL

Summary of technologies assessed under refinement of various livestock : NIL

Summary of technologies refined under various enterprises : NIL

Summary of technologies refined under home science : NIL

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
Millets	Drought Mitigation	Management of Soil Surface Crust in Red Soils		10	5	29.8	22.75	30.9	Bulk Density of Soil-Kg/m3-1.62	1.73	25,950	47,680	21,730	1.8	22,400	36,300	13,920	1.6
	Value Addition	Branding and Labelling of value added products from Ragi		2 Groups	-	-	-	-	-	-	38,500	39,000	20,500	1.5	25,000	30,000	5,000	1.2
Oilseeds		Demonstration of KCG-6 Groundnut Variety		4	3	13.26	11.18	18.60	Foliar Disease Incidence-%15.25	23	32,407	66,313.	33,906	2.06	30,541	46,419	15,878	1.53
Pulses	Variety introduction	Enhancement of Pigeon pea yield through introduction of BRG-5		25	10	11.68	8.18	42.78	Plant Height-cm:180	173	46,726	1,16,815	70,089	2.49	40,885	8,1771	40,885	2
Vegetables	Variety introduction	Introduction of Arka Rakshak F1 hybrid in Tomato		5	2	276.2	18.36	33.52	Bacterial Wilt-%:9.62	36.66	44,084	1,65,736	1,21,652	3.75	46,570	1,10,160	63,590	2.36
	ICM	Use of Polythene mulch in Tomato		3	1	746	652	14.4	Number of Fruits:46.6	37.3	82,850	3,35,700	2,52,850	4.05	73,950	2,60,800	1,86,850	3.5
	ICM	Integrated crop Management in Onion		10	5	253.4	177.4	42.84	Bulb weight-gram:99.5	92.1	96,560	2,53,400	1,56,840	2.72	96,560	1,77,380	80,820	1.91
Flowers	Variety introduction	Demonstration of China Aster variety Arka Adya		2	1	4.5	3.2	40.6			35,275	1,35,000	99,725	3.83	30,400	96,000	65,600	3.14
Fruits	INM	Integrated Crop Management in Pomegranate		10	5	125	95	31.5	Bacterial blight-%9.6	22.5	1,75,500	10,20,500	8,45,000	5.8	1,45,900	7,50,500	6,04,600	5.1
	ICM	Demonstration of High density planting of Banana		3	1	Ongoing												
	IPM	Management of Mango Stem Borer by Sealer cum Healer		5	100 trees	Ongoing												

	PHT	Improved practices of production and post - harvest in Mango		2 Groups	10	Ongoing												
Medicinal and aromatic		Cost effective Arka Microbial consortium(AMC) for high quality and crop yield of Betelvine		10	2	2.9 lakhs	2.4 lakhs	20.8	Disease incidence-%:26.07	28.4	38,460	72,500	34,040	1.9	36,500	48,000	11,500	1.3
	Total																	

Livestock :NIL

Fisheries : NIL

Other enterprises : NIL

Women empowerment : NIL

Farm implements and machinery : NIL

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)			
				Demonst-ration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Vegetable crops										
Tomato	Private hybrid	5	2	276.2	18.36	33.52	46,570	1,10,160	63,590	2.36
	Arka Rakshak F1 Hybrid	3	1	746	652	14.4	73,950	2,60,800	1,86,850	3.5
Total		**8**	**3**	**1,022.2**	**670.36**	**47.92**	**1,20,520**	**3,70,960**	**2,50,440**	**5.86**

IV. Training Programme

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Integrated Farming	1	43	0	43	2	0	2	45	0	45
Soil and Water Conservation	1	17	0	17	0	0	0	17	0	17
Integrated Nutrient Management	1	0	12	12	0	0	0	0	12	12
Production of organic inputs	1	29	0	29	3	0	3	32	0	32
Horticulture										
a) Vegetable Crops										
Others (pl.specify)-Organic farming in Horticulture Crops	4	56	8	64	3	0	3	59	8	67
b) Fruits										
Training and Pruning	1	17	0	17	2	0	2	19	0	19
Cultivation of Fruit	4	69	33	102	5	13	18	74	46	120
Management of young plants/orchards	1	13	16	29	1	5	6	14	21	35
c) Ornamental Plants										
d) Plantation crops										
Production and Management technology	2	29	0	29	3	0	3	32	0	32
Soil Health and Fertility Management										
Soil fertility management	1	16	0	16	6	0	6	22	0	22
Soil and water testing	4	59	1	60	4	0	4	63	1	64
Livestock Production and Management										
Animal Nutrition Management	1	92	2	94	6	1	7	98	3	101
Home Science/Women empowerment										
Value addition	2	5	45	50	1	16	17	6	61	67
Women empowerment	1	0	28	28	0	3	3	0	31	31
Production of Inputs at site										
Seed Production	1	37	0	37	3	0	3	40	0	40
Mushroom production	2	26	16	42	5	2	7	31	18	49
Others (pl.specify)-Methodologies for Food grain storage in CWC	1	31	5	36	2	0	2	33	5	38
TOTAL	**29**	**539**	**166**	**705**	**46**	**40**	**86**	**585**	**206**	**791**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Integrated Crop Management	1	14	0	14	1	0	1	15	0	15
Others (pl.specify) Organic Farming	5	37	112	149	6	11	17	43	123	166
Horticulture										
a) Vegetable Crops										
Off-season vegetables	1	15	9	24	2	1	3	17	10	27
Protective cultivation	1	27	0	27	3	0	3	30	0	30
b) Fruits										
Cultivation of Fruit	3	64	51	115	5	4	9	69	55	124
Others (pl.specify) –Dry Land Horticulture	2	71	15	86	4	1	5	75	16	91
c) Ornamental Plants										
Others (pl.specify) commercial floriculture	1	16	13	29	4	2	6	20	15	35
d) Plantation crops										
Production and Management technology	1	39	0	39	3	0	3	42	0	42
Soil Health and Fertility Management										
Soil fertility management	1	43	0	43	2	0	2	45	0	45
Integrated water management	1	17	0	17	2	0	2	19	0	19
Soil and water testing	10	274	86	360	15	13	28	289	99	388
Livestock Production and Management										
Others (pl.specify)Sheep and Goat Rearing	1	18	4	22	2	1	3	20	5	25
Home Science/Women empowerment										
Value addition	1	0	14	14	0	0	0	0	14	14
Agril. Engineering										
Post Harvest Technology	1	22	2	24	2	0	2	24	2	26
Plant Protection										
Integrated Pest Management	1	23	0	23	2	0	2	25	0	25
Integrated Disease Management	5	72	65	137	6	6	12	78	71	149
Bio-control of pests and diseases	1	24	43	67	2	1	3	26	44	70
TOTAL	**37**	**776**	**414**	**1190**	**61**	**40**	**101**	**837**	**454**	**1291**

Training for Rural Youths including sponsored training programmes (on campus)-Nil

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
Any other (pl. specify)-Terrace Gardening	1	26	37	63	2	5	7	28	42	70
Nutrition Gardening	2	0	31	31	0	8	8	0	39	39
TOTAL	**3**	**26**	**68**	**94**	**2**	**13**	**15**	**28**	**81**	**109**

Training programmes for Extension Personnel including sponsored training programmes (on campus)-Nil

Training programmes for Extension Personnel including sponsored training programmes (off campus)-Nil

Sponsored training programmes conducted-Nil

Details of Vocational Training Programmes carried out by KVKs for rural youth-Nil

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Field Day	5	228	25	253
Kisan Mela	4	3000	792	3792
Exhibition	6	18464	2970	21434
Film Show	3	127	16	143
Group meetings	1	34	4	38
Lectures delivered as resource persons	17	931	11	942
Newspaper coverage	4	-	-	-
Radio talks	5	-	-	-
TV talks	4	-	-	-
Popular articles	7	-		-
Extension Literature	8	-	-	-
Advisory Services	235	1241	140	1381
Scientific visit to farmers field		0		0
Farmers visit to KVK	196	1409	107	1516
Diagnostic visits	44	136	6	142
Exposure visits	2	50	4	54
Ex-trainees Sammelana		0		0
Soil health Camp	6	243	6	249
Self Help Group Conveners meetings	1	1500	18	1518
Mahila Mandals Conveners meetings		0		0
Celebration of important days (International Women Day)	1	32	2	34
Any Other (Specify) Special day celebrations	6	641	405	1046
Total	**548**	**28136**	**4516**	**32652**

Details of other extension programmes

Particulars	Number
Electronic Media	0
Extension Literature	9
News Letter	2
News paper coverage	4
Technical Articles	7

Technical Bulletins	5
Technical Reports	4
Radio Talks	5
TV Talks	4
Animal health amps (Number of animals treated)	0
Total	**40**

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (Kg)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Finger millet	ML 365	944	37,760	27
	Navane	Local variety	17	1,700	0
Oilseeds	Ground nut	KCG-6	400	20,000	0
Pulses	Red gram	BRG-5	120	18,000	0
Vegetable crops	Tomato	Arka Meghali	10	20,000	6
Vegetable crops	Okra	Arka Anamika	52	20,800	51
Vegetable crops	Onion	Arka Kalyan	200	2,40,000	70
Vegetable crops	Onion	Bhema Shakti	20	24,000	7
Vegetable crops	Radish	Arka Nishant	6	2,400	26
Vegetable crops	Cowpea	Arka Garima	62	12,400	18
Fruit crops	Papaya	Arka Prabhat	1	1,00,000	2
Spices	Vegetable Seed Kits	10 different vegetable seeds	5,000 No,s	5,00,000	649
Cereals (crop wise)	Finger millet	ML 365	944	37,760	27
	Navane	Local variety	17	1,700	0
Total				**9,97,060**	**856**

Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify	Number	Value (Rs.)	Number of farmers to whom provided
Plantation	Areca nut	Hirehalli tall	15,000	3,00,000	55
		Sprouts	550	2,750	15
	Coconut	Arsikere tall	200	12,000	20
Fruits	Mango	Alphanso, Mallika, Dashehari	110	4,400	15
	Guava	AS, Pink flesh, L-49	100	4,000	30
	Amla	NA-4,5,7	260	10,400	30
	Lime	Seedless	100	4,000	55
	Pomelo	Devanahalli	463	9,260	80
	Lime	Kazi Lime	725	14,500	85

	Pomegranate	Bhagwa	1,468	58,720	15
	Rose Apple	-	271	5,420	40
	Sapota	Cricket Ball	175	7,000	124
	Tamarind	PKM-1	125	5,000	25
	Jamun	Gokak	72	2,880	10
	Fig	Poona	73	2,920	5
	Custard apple	Balanagar	72	2,880	6
	Others seedlings		152	1,520	37
	Fruit crop Scions		6,200	12,400	2
Flower Crops	China Aster	-	1,20,000	40,000	15
Total			**26,191**	**4,63,050**	**664**

Production of Bio-Products

Bio Products	**Name of the bio-product**	**Quantity Kg**	**Value (Rs.)**	**No. of Farmers**
Bio Fertilizers	Banana special	8,510	12,76,500	1,650
	Vegetable Special	5,418	8,12,700	1,290
	Mango Special	3,228	4,84,200	868
	Citrus Special	1,162	17,43,000	432
Bio-pesticide	Neem Soap	2,996	4,49,400	1,178
	Pongamia Soap	1,659	2,07,375	868
	Sealer cum Healer	458	68,700	156
Bio-fungicide	Arka Microbial consortium	2,367	1,36,700	680
Bio Agents	Mango fruit fly traps & lures-Nos.	584	58,400	78
Others	Amla Juice -Ltrs	310	40,300	168
	Amla Candy	280	84,000	420
	Mushroom Spawn	350	28,000	212
	Ragi Malt	100	20,000	54
Total			**54,09,275**	**8,054**

Production of livestock and related enterprise materials-Nil

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2015-16:

Details	**No. of Samples analyzed**	**No. of Farmers benefited**	**No. of Villages**	**Amount realized (Rs.)**
Soil Samples	1,869	1760	950	1,86,900
Water Samples	1,263	1260	809	63,150
Plant samples	10	8	8	1,000
Manure samples				
Others (specify)				
Total	3,142	3,028	1,767	2,51,050

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted : 01
2.2.2016

IX.NEWSLETTER

Number of issues of newsletter published : 02
April – June, 2015 July –September ,2015

X. RESEARCH PAPER PUBLISHED

Number of research paper published : 06

1. Assessment of On-farm employment generation through natural resource conservation activities in the semi-arid region, The Andhra Agric. Journal, 61(4):921-926.
2. Decomposition analysis of output change under watershed management interventions in semi-arid regions, Indian Journal of Soil Conservation, Vol.43, No.1, pp: 110-114.
3. Suitable Chickpea cultivars for rainfed situations in black soils of south India. Legume Research, 38(2) 2015: 229-234.
4. Effect of Arka Microbial Consortium and Seed Pro Growth Promoter on Soil Health and Productivity of Tomato Crop, International Journal on Agricultural Sciences, July-December 2015, 6 (2): 356-359.
5. Effect of Black polythene Mulches on Growth and Yield of green chilli (Capsicum annuum) in Tumakuru District, Karnataka, Nature Environment and Pollution Technology - Accepted (P-ISSN 0972-6268; E-ISSN 2395-3454).- Accepted for publication – Paper No.B-3174, by Letter Dtd.25-04-15
6. Evaluation of Chickpea varieties under compartmental bunding in rainfed situation, Journal Legume Research - Accepted for publication by Letter No.ARCC/LR-3496, Dtd.19-12-2015.

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

----------XXXXXXX----------

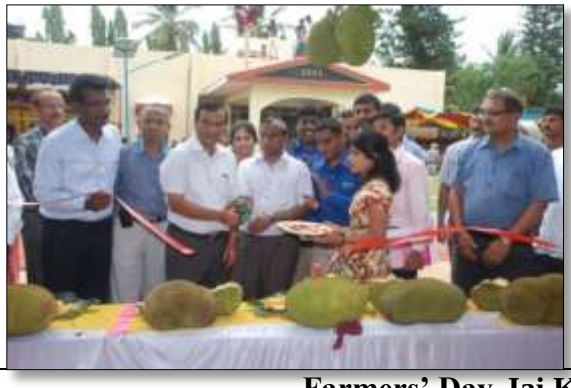
ON Campus Training Programmes	
	
Mushroom Cultivation	**Amla Value Addition**
	
Importance of Organic Farming	**Plantation Crops Cultivation**
OFF Campus Training Programmes	
	
IPDM in Redgram	**HDP in Banana at Bellavi**
	
Soil sampling method	**Use of Mango fruit fly traps**

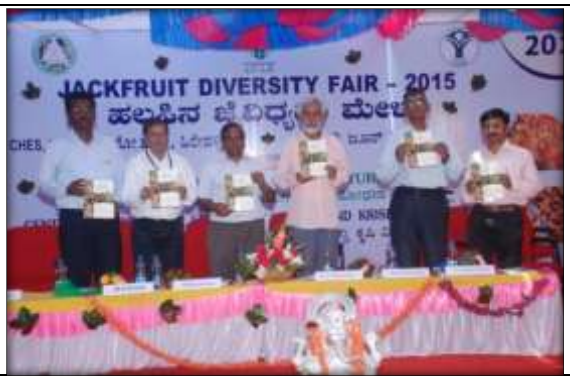
Extension Activities	
	
Banana Cultivation	**Exhibition at Rabi awareness Programme**
	
Guest Lectures at DATC Chikkanahalli Sira	**Onion field at Bukkapattana**
	
Mango field at Kodigenahalli	**Arecanut Field at Yellerampura**
	
Ragi Field day at D.Nagenahalli on 26.10.15	**Banana Field day at Kolihalli**

Delegates visit to KVK Hirehalli

Dr. Krishnakumar, DDG (Horti) | **Dr. Chowdappa, Director, CPCRI**

Jackfruit Mela : 27th June 2015 (CHES-KVK)





Farmers' Day-Jai Kisan Jai Vigyan Divas-
29th December 2015, CHES-KVK

Rabi Awareness Programme-23.1.2016 (KVK-CHES)

OFTs & FLDs	
	
Assessment of Areca nut -French bean intercropping system for high soil fertility and higher income	**Assessment of Redgram-Greengram (1:4) as a intercrop in Mango orchard**
	
Evaluation of technology for management of Pomegranate wilt	**Management of Soil Surface Crust in Red Soils**
	
Demonstration of High density planting in Banana Grand Naine	**Management of Mango Stem Borer by Sealer cum Healer**
	
Improved practices of production and post - harvest in Mango	**Integrated Crop management in Onion**