# ANNUAL REPORT 2010-11

# (FOR THE PERIOD APRIL 2010 TO MARCH 2011)

# KRISHI VIGYAN KENDRA –HIREHALLI (TUMKUR)

# PART I - GENERAL INFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	FAX		
KRISHI VIGYAN KENDRA, HIREHALLI, TUMKUR-572 168	0816- 2243792	0816-2243214	iihrkvk@gmail.com	www.iihr.ernet.in

## 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	080- 28466420	080- 28466291	director@iihr.ernet.in	www.iihr.ernet.in
Post, Bangalore- 560089				

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. L.B. NAIK	080-25449212	9449816584	lbnaik@iihr.ernet.in

1.4. Year of sanction: 28th, March 2009

# **1.5. Staff Position (as 31<sup>st</sup> March 2010)**

Sl. No.	Sanctioned Post	Name of the Incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic Pay	Date of Joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Co-ordinator	Dr. L.B.Naik	Principal Scientist & Programme Coordinator	М	Agronomy	Ph.D. Agronomy					
2	Subject Matter Specialist	Sri K.N. Jagadish,	SMS (Agril Extension)	М	Agril.Extensio n	M.Sc. Agriculture	15600 - 39100+5400	21630	17.11.2009	Permanent	OBC
3	Subject Matter Specialist	Sri P.R.Ramesh,	SMS(Soil Science)	М	Soil Science	M.Sc. Agriculture	15600 - 39100+5400	21630	17.11.2009	Permanent	OBC
4	Subject Matter Specialist	Sri Prashanth J.M	SMS(Horticultur e)	М	Horticulture	M.Sc. Agri Horticulture	15600 - 39100+5400	21630	24.11.2009	Permanent	Others
5	Subject Matter Specialist	Sri B. Hanumanthe Gowda	SMS(Plant Protection)	М	Plant Protection	M.Sc. Agriculture	15600 - 39100+5400	21630	02.12.2009	Permanent	Others
6	Subject Matter Specialist	Ms. Radha R.Banakar	SMS(Home Science)	F	Home Science	M.Sc. Agriculture	15600 - 39100+5400	21630	05.12.2009	Permanent	Others
7	Subject Matter Specialist	Dr. Somashekhar	SMS (Plant Breeding)	М	Plant Breeding	Ph.D. Agriculture	15600 - 39000+5400	21630	07.12.2009	Permanent	Others
8	Programme Assistant (Lab Tech.)/T-4	Sri Shivashenkaramurthy	Programme Assistant (Lab.Tech.)	М	Agronomy	M.Sc. Agriculture	9300 - 34800+4200	11360	30.09.2009	Permanent	SC
9	Programme Assistant (Computer)/ T-4	Ms. Jyoti Appu Naik	Computer Programmer	F	Information Science	B.E.	9300 - 34800+4200	11360	01.10.2009	Permanent	РН
10	Programme Assistant/ Farm Manager/T-4	Sri K.S.Sanna Manjunath	Farm Manager	М	Agronomy	M.Sc. Agriculture	9300 - 34800+4200	11360	08.10.2009	Permanent	OBC
11	Assistant	Sri D. Krishnappa	Accounts	М	Accounts	SSLC	9300 - 34800+4200	15460	14.10.2009	Permanent	Others
12	Jr.Stenographer	Smt.Veda Kurnalli	Stenographer	F	Stenographer	PUC	5200 - 20200+2400	9910	17.02.2010	Permanent	Others
13	Driver	Sri M.H.Ningappa	Driver	М	Driver	SSLC	5200 - 20200+2000	8460	30.12.2009	Permanent	Others
14	Driver	Sri Hemanth Kumar	Driver	М	Driver	PUC	5200 - 20200+2000	8460	04.01.2010	Permanent	OBC
15	Supporting staff	Smt Jaya	Supporting Staff	F	Supporting Staff	-	5200 - 20200+1800	8820	23.07.2009	Permanent	SC
16	Supporting staff	Sri P.Narayanappa	Supporting Staff	М	Supporting Staff	-	5200 - 20200+1800	8820	24.07.2009	Permanent	SC

#### Total land with KVK (in ha.) : 16.08 ha. 1.6.

Sl. 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	-

# Infrastructural Development: A) Buildings 1.7.

SI.		Source of funding	Stage Complete	Incomplete	1			
51. No.	Name of building		Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building (550 Sq. Mts)	ICAR	-	-	-	-	-	Yet to be constructed
2.	Farmers Hostel (305 Sq. Mts)	ICAR	-	-	-	-	-	Yet to be Constructed
3.	Staff Quarters	-	-	-	-	-	-	-
4.	Rain Water Harvesting System	ICAR	-	-	8.00 Lakhs	March 2010		Ongoing
5	Threshing floor	IIHR	-	-	-	-	-	-
6	Farm Godown	IIHR	-	-	-	-	-	-

#### **B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Diesel Jeep	2009	5,96,783	43450	
Matan Carls	2010	52 (59	4050	Good
Motor Cycle	2010	52,658	4950	
Honda – Aviator	2010	46025	1800	
Power Tiller	2010	1, 42,400	92 hrs	
Tractor	2011	560000	24 hrs	

# C) Equipments & AV Aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Fax Machine	2010	21,381	
Xerox Machine	2010	67,262	
Camera Nikon – Digital	2010	24,950	Good
Computer with Accessories	2010	49,900	
White Board with Stand	2010	1,500	
LCD Projector with Accessories	2010	1,00,000	

Sl.No.	Date	Number of	No. of	Salient Recommendations	Action
		Participants	absentees		taken
1.	29.3.2010	21	06	1. It is suggested to take up the soil and	All these
				water testing in Tumkur taluk	suggestions
				2. It is advised to lay out the demonstration	were taken
				in farmers fields on intercropping instead of	into
				mono-cropping.	consideration
				3. It is advised to give technical guidance for	in
				producing quality seeds in the farmers field	formulating
				4. Thrust should be given to water	the Action
				harvesting technology and integrated	Plan and
				farming system	implemented
				5. Activities related to floriculture, poly	during the
				house production can be taken up with the	year 2010-11
				help of Department of Horticulture.	
				6. It is suggested to take up the animal	
				related activities with the help of state	
				veterinary Department and SMS (Animal	
				Science), KVK, Konehalli	
				7. Emphasis should be given for micro	
				irrigation system for increasing water use	
				efficiency	
				8. Resources of other KVK can be utilized	
				for better implementation of various	
				Programmes	
				9.Emphasis should be given on aerobic	
				paddy cultivation in area like Pavagada	
				10. Groundnut diggers can be used	
				efficiently for harvesting groundnut crop	
				11. Tamarind processing machine should be	
				demonstrated at KVK premises to motivate	
1				tamarind processing	
				12. Establishment of Nutrition kitchen	
				garden in KVK farm	
				13. It is suggested to demonstrate the success	
				stories of the farmer	

# 1.8. A). Details SAC meeting conducted in 2010-11

# PART II - DETAILS OF DISTRICT

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

Sl. 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)

Sl. No.	Agro-climatic Zone	Characteristics
1.	Agro-chinatic ZoneCentral Dry Zone (ZoneIV)Taluks: Koratgere,Madhugiri, Sira,Pavagada	<ul> <li>This zone covers an area of 4.74 Lakhs hectare</li> <li>The Annual rainfall ranges from 454 and 718 mm, of which more than 55% received in Kharif season.</li> <li>The elevation ranges from 639 and 1197m</li> <li>Soils are red sandy loams in major areas, shallow to deep black in remaining areas.</li> <li>The major crops grown are Ragi, Paddy, Redgram,</li> </ul>
		Groundnut, Sunflower, Coconut, Arecanut, Mango, Banana,

		Tomato, Brinjal, Beans, Peas, Aster, Dairy
2.	Eastern Dry Zone (Zone V) Taluk: Tumkur	<ul> <li>This zone covers an area of 1.04 Lakh hectares.</li> <li>The Annual rainfall ranges from 679 and 889 mm, of which more than 50% received in Kharif season.</li> <li>The elevation is 818 m from sea level.</li> </ul>
		<ul> <li>Soils are red loamy in major areas, shallow to deep black in remaining areas.</li> <li>The major crops grown are Groundnut, Maize, Paddy, Ragi, Redgram, Tomato, Brinjal, Mango,Sapota, Arecanut,Coconut, Aster,Dairy</li> </ul>

Sl. 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		
Sl. No.	Soil Type	Characteristics	Area in ha
1.	Red Sandy Loam	<ul> <li>Colour given by haematites or Yellow limonites</li> <li>Poor in soil fertility</li> <li>Low base exchange capacity</li> <li>Deficient in organic matter</li> <li>Low water holding capacity</li> <li>The pH ranges from 5.56.5</li> <li>Low cohesion, plasticity &amp; swelling</li> </ul>	6,15,230
2.	Red Loam	<ul> <li>Colour given by oxides of iron</li> <li>Poor in soil fertility</li> <li>Low- medium base exchange capacity</li> <li>Deficient in organic matter</li> <li>Low water holding capacity</li> <li>The pH ranges from slightly acidic or neutral</li> <li>Low cohesion , plasticity &amp; swelling</li> </ul>	2,04,093
3.	Shallow Black Soil	<ul> <li>Colour varying from dark brown to dark yellowish brown</li> <li>Soil with more than 35 per cent clay and crack when dry.</li> <li>High soil fertility</li> <li>High base exchange capacity</li> <li>High organic matter content</li> <li>High water holding capacity</li> <li>The pH ranges from 7.5 - 8.5</li> <li>High cohesion, plasticity &amp; swelling</li> </ul>	2,45,432

# 2.3 Soil type/s

Sl. No.	Сгор	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
			(wiethe tons)	(Kg/lla)
1.	Paddy	39753	85396	3009
2.	Ragi	187252	309759	1653
3.	Maize	20065	59702	2985
4.	Jowar	2245	2629	1222
5.	Redgram	15689	11386	872
6.	Groundnut	142906	13417	896
7.	Sunflower	11611	9132	651
8.	Cotton	668	2848	487
9.	Mango	11929	229207	19210
10.	Sapota	738	10283	13930
11.	Arecanut	22058	37220	2000
12.	Coconut	132587	20912	0.16 Lakhs nuts/ha
13.	Banana	4909	140178	28580
14.	Tomato	632	22806	36090
15.	Brinjal	312	10900	34940
16.	French Bean	191	2173	11380
17.	Gourds	494	10275	20800
18.	Dry Chilli	2498	4996	2000
19.	Onion	414	7938	1917(
20.	Aster	959	9590	10000
21.	Jasmine	955	4893	5120
22.	Chrysanthemum	705	10575	15000
23.	Mari Gold	110	1100	10000
24.	Crossandra	154	770	5000

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

\* Source: Dept of Agriculture, Tumkur & Tumkur at a Glance 2009-10 and Horticultural Crop Statistics of Karnataka State at a glance: 2008-09

#### 2.5. Weather data

Month	Rainfall	Temper	ature <sup>0</sup> C	Relative Hu	ımidity (%)
	( <b>mm</b> )	Maximum	Minimum	<b>7.00 hrs</b>	13.00hrs
Jan 2010	4.2	28.3	12.1	60.0	40.6
Feb 2010	0.5	30.6	11.4	61.3	45.6
Mar 2010	5.4	33.0	17.3	69.0	43.4
Apr 2010	58.0	34.7	20.4	82.0	64.9
May 2010	96.9	30.7	20.3	70.7	54.8
Jun 2010	56.8	29.8	20.1	68.5	54.2
Jul 2010	114.9	29.0	19.3	72.5	56.1
Aug 2010	129.3	29.4	20.0	76.0	60.0
Sep 2010	97.5	28.1	19.7	83.2	66.0
Oct 2010	115.4	29.4	17.6	54.8	46.4
Nov 2010	157.3	27.4	17.8	77.5	60.7
Dec 2010	0.0	26.9	17.7	73.7	53.5

\* Dept. of Agriculture, Tumkur

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

Category	Population	Production(milk) 000 tons	Productivity(lt/animals)
Cattle		· · ·	
Crossbred	62906	54	5.5745
Indigenous	440888	56	2.0671
Buffalo	217528	68	2.5382
Sheep meat 000 tons		· · ·	
Crossbred	9		
Indigenous	884643	17.31	
Goats	322373	16.60	
Pigs			
Crossbred	632	0.23	
Indigenous	12411		
Rabbits	465	NA	
Poultry		egg production in lak	ths
Hens			
Desi	642382	273	
Improved		71	
Category	Area	Production	Productivity
Inland(Fishes)	1306 ha	16717 M.Tonnes	650-700 kg/ha

 $\mathbf{2.7}$  :District Profile has been prepared and submitted  $\$  Yes / No: Yes

# 2.8 : OPERATIONAL AREA DETAILS FOR THE YEAR 2010-11

Sl.No.	Taluk	Name of the Block	Name of the Village	How long the Village is covered under Operational Area of the KVK (specify the years)	Major Crops & Enterprises	Major Problem Identified	Identified Thrust Areas
1.	Tumkur	Haralur	Haralur, Beemasandra, Bairsandra, Gollahalli, Neralpur	One Year Six Months	Groundnut, Maize, Paddy, Ragi, Redgram, Tomato, Brinjal, Mango,Sapota, Arecanut, Coconut, Aster,Dairy	<ol> <li>Use of local varieties and low yield.</li> <li>No seed treatment</li> <li>Poor soil and nutrient management</li> <li>Tikka disease, root grub, Red and hairy caterpillar in Groundnut.</li> <li>Zinc (Zn),Iron (Fe)deficiency in Maize and Zn in Paddy</li> <li>Pod borer and sterile mosaic disease in red gram.</li> <li>Shoot and fruit Borer in Brinjal</li> <li>Powdery mildew and hoppers in Mango.</li> <li>Lack of skill in nursery technique &amp; management,</li> <li>Lack of knowledge about importance of soil &amp; water testing,</li> <li>Lack of knowledge in pre and post harvest technology management.</li> <li>Lack of knowledge for income generating activities, malnutrition and unhygienic practices.</li> <li>Dropping and splitting of areca nuts</li> </ol>	<ol> <li>Popularization of HYV / hybrids</li> <li>Seed production techniques in vegetables and field crops</li> <li>Integrated Nutrient</li> <li>Management and Soil test based fertilizer application</li> <li>Integrated Pest &amp; Disease</li> <li>Management</li> <li>Propagation techniques in fruits and vegetables</li> <li>Income generating activities,</li> <li>Value added products</li> <li>Nutrition education and hygiene</li> <li>Post harvest technology in vegetables and fruits</li> </ol>

2.	Koratagere	Kymanhalli,	Chikkavalli, Kymanhalli, Bidalot, Kodlahalli	One Year Six Months	Maize, Paddy,	1. Use of local varieties and low yield.	1.Popularization of HYV / hybrids
3.	Madhugiri	Badavanhalli,	Badavanhalli, Siddapur, Siridragallu, Vadderahalli		Ragi, Ragi, Redgram, Tomato, Sunflower, Banana, Groundnut, Mango, Sapota, Arecanut, Coconut, Aster, Dairy, Frenchbean, Brinjal & Marigold.	<ol> <li>No seed treatment</li> <li>Poor soil and nutrient management</li> <li>Tikka disease, root grub, Red and hairy caterpillar in groundnut.</li> <li>Zn, Fe deficiency in Maize and Zinc in Paddy</li> <li>Pod borer, and sterile mosaic disease in red gram.</li> <li>Flower and Fruit dropping, Powdery mildew and hoppers in Mango .</li> <li>Low yield in Banana</li> <li>Dropping and splitting of areca nuts.</li> <li>Lack of skill in nursery technique &amp; management</li> <li>lack of knowledge about importance of soil &amp; water testing,</li> <li>Lack of knowledge regarding pre and post harvest technology management.</li> <li>Lack of knowledge in income generating activities, malnutrition and unhygienic practices.</li> <li>Drudgery</li> <li>Shoot and fruit Borer, Bacterial blight in Brinjal.</li> </ol>	<ul> <li>2.Seed Production Techniques in vegetables and field crops</li> <li>3. Bud necrosis in sun flower</li> <li>4. Management of saline soil in Paddy.</li> <li>5.Integrated Nutrient Management and Soil test based fertilizer application</li> <li>6.Integrated Pest &amp; disease Management</li> <li>7.Propagation techniques and post harvest in fruits and vegetables</li> <li>8.Income generating activities,</li> <li>9.Value added products</li> <li>10.Nutrition education and hygiene</li> <li>11.Drudgery reduction</li> </ul>

4.	Pavagada	Shilapur	Kotgudda, Shilapur, Mugadal Betta, Arkyatanhalli	One Year Six Months	Groundnut, Sunflower, Ragi, Maize, Paddy, Redgram, Tomato, Brinjal & Dairy,	<ol> <li>Use of local varieties and low yield.</li> <li>Moisture stress</li> <li>No seed treatment</li> <li>Poor soil and nutrient management</li> <li>Tikka disease, collar rot, root grub in Groundnut.</li> <li>Insufficient water for paddy cultivation</li> <li>Pod borer and sterile mosaic disease in red gram.</li> <li>Shoot and fruit Borer Bacterial blight in Brinjal.</li> <li>Lack of knowledge about importance of soil &amp; water testing,</li> <li>Lack of knowledge in pre</li> </ol>	<ol> <li>Popularization of HYV / hybrids</li> <li>Soil and water conservation</li> <li>Seed Production Techniques in field crops</li> <li>Management of Bud necrosis in sun flower</li> <li>Aerobic paddy cultivation</li> <li>Integrated Nutrient</li> <li>Management and Soil test based fertilizer application</li> <li>Integrated Pest &amp; disease</li> <li>Management</li> <li>Income generating activities,</li> <li>Value added Products</li> <li>Nutrition education and hygiene</li> <li>Drudgery reduction.</li> </ol>
4.	ravagaua	Shilapur				<ul><li>8. Shoot and fruit Borer</li><li>Bacterial blight in Brinjal.</li><li>9.Lack of knowledge about</li><li>importance of soil &amp; water</li></ul>	Management 6.Income generating activities, 8.Value added Products 9.Nutrition education and hygiene

5.	Sira	Kataveeranahalli	Hendore, Kataveeranahalli, Chikkanahalli,Veerapura and Kamagondanahalli	One Year Six Months	Groundnut, Maize, Paddy, Ragi, Cotton, Redgram, Vegetables Mango, Sapota, Arecanut, Coconut, Aster, Dairy & Brinjal	<ol> <li>Use of local varieties and low yield.</li> <li>No seed treatment</li> <li>Poor soil and nutrient management</li> <li>Tikka disease, root grub, Red and hairy caterpillar in Groundnut.</li> <li>Zn, Fe deficiency in Maize and Zn in Paddy</li> <li>Pod borer, and sterile mosaic disease in red gram.</li> <li>Powdery mildew and hoppers in Mango.</li> <li>Lack of skill in nursery technique &amp; management,</li> <li>Lack of knowledge about importance of soil &amp; water testing,</li> <li>Lack of knowledge in income generating activities, malnutrition and unhygienic practices.</li> <li>Dropping and splitting of areca nuts</li> <li>Shoot and fruit Borer in</li> </ol>	<ol> <li>Popularization of HYV / hybrids</li> <li>Seed Production Techniques in vegetables and field crops</li> <li>Integrated Nutrient Management and Soil test based fertilizer application</li> <li>Integrated Pest &amp; Disease Management</li> <li>Propagation techniques and post harvest in fruits and vegetables</li> <li>Income generating activities,</li> <li>Value added Products</li> <li>Nutrition education and hygiene</li> <li>ICM in Cotton</li> </ol>
						practices. 12.Dropping and splitting of	

#### 2.9 **Priority thrust areas**

Sl.	Thrust area
No.	
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 Conversation
10.	Drudgery Reduction
11.	Income Generating Activities
12.	Child and Women Care and balanced Nutrition
13.	Integrated Cropping System
14.	Propagation Techniques in Fruits and Vegetables
15.	Fodder Production and Dairy Farming
16.	Mushroom Cultivation

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

	0	FT			FLD				
		1				2			
Num	ber of OFTs	Numb	er of farmers	Num	ber of FLDs	Number of farmers			
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
10	10	42	42	16	16	150	150		
	Tra	ining			Extension	Programme	S		
		3				4			
Numb	Number of Courses		Number of Participants		Number of Programmes		of participants		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
85	57	1500	1478	719	880	35000	31181		
	Seed Produ	uction (Qtl.)	)	Planting materials (Nos.)					
		5				6			
	Target	Achievem	ent		Target	Achievement			
12.015		2.5		61000		48000			
Livest	tock, poultry strai	ns and fing	erlings (No.)		Bio-products (Kg)				
	· <b>- · ·</b>	7				8			
	Target	Achievem	ent	Target Achieve			ent		

					reas identified for			Intervention	5					
S. No	Thrust area	Crop/ Enterprise	Identified Problem	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.)	l pro	oply of bio oducts
													No.	Kg
1.	Soil and water conservation	Paddy	Salinity		Management of saline soils in paddy	1			6	1.25			2	8
	Soil and water conservation		Limited water		Aerobic paddy cultivation	3			4	0.07			2	4
2.	High yielding variety and cropping system	Ragi	Mono cropping		Ragi based double cropping system	1			5	2.1			2	20
3.	ICM	Maize	1.Zinc deficiency 2.Downy mildew and TLB disease 3.Low yield		Enhancing productivity through ICM				6	0.75				
4.	Integrated Groundnut Pest & disease Management High	Groundnut	Drudgery		Groundnut Decorticator	2			3	-			-	-
			1. Collar rot	Management of collar rot in groundnut		1			5	-			3	253
	Yielding varieties / Hybrids and Drudgery Reduction		1. Smaller seed size	Assessment of GPBD-5 a bold seeded variety		2			8	0.6			-	-
5.	ICM	Redgram	Low yield due to seed drill sowing	Enhancing the productivity in Red gram production system (Transplanting)		2			5	0.09			-	-
	PHT		Storage Problem		Safe Storage of Pulses	1	1		3	-			-	-
6.	ICM	Mango	1.Flower & fruit dropping 2.Fruit fly 3.Powdery mildew		ICM in Mango	3			8	-			-	-

#### 3.B1. Abstract of Interventions undertaken based on Thrust Areas identified for the District as given in Sl.No.2.7

	Intercropping		Mono -	Assessment of					6	0.8			-	-
	system		cropping in	Mucuna										
			Mango	as a intercrop										
				in Mango										
7.	ICM	Banana	1.Low plant	Paired row	-	2			7		4800		-	-
			population	planting system										
			2.Low yield	in banana										
			& income											
	INM		1.Lower	-	Micronutrient	1			6	-	-		-	-
			bunch size		management in									
			and yield		Banana									
8.	INM	Arecanut	1.Splitting	Management of	-	2			5	-	-		-	-
			of nuts and	nut splitting in										
			low yield	Arecanut										
	IDM		Anabe Roga	-	Integrated	1		1	8	-	-		1	200
					Management of									
					Anabe Roga									
9.	IPM	Coconut	Mite	Management of					5	-	-		1	100
		_	problem	mites					-					_
10.	IDM	Pomegranate	Bacterial	-	Integrated				6	-	-		-	-
			blight		Management of									
					Bacterial blight									
11.	High	Tomato	1. Local	Performance					5	1.125			-	-
11.	yielding	Tomato	varieties	and assessment					5	kg				
	varieties		2.Low	of tomato						кg				
	varieties		acidity and	varieties										
			TSS	varieties										
			100											
	INM		1.Low	Assessment of	-				5	-			1	4
			nutrient use	microbial										
			efficiency	consortium for										
			5	tomato										
				production										
	ICM		1.Local	-	ICM in tomato	2			10	200			3	512
			varieties							gms				
			2. Bacterial							-				
			blight and											
			leaf curl											
12.	IPM	Brinjal	1. Bacterial	-	ICM in brinjal	1	1		7	375	1		2	252
		, i i i i i i i i i i i i i i i i i i i	wilt		5					gms				
			2. Low yield				1			Ŭ		1	1	

13.	ICM	French Bean	1. Rust Disease 2. Low Yield	-	ICM in French bean	1	1		6	1.3		1	250
14.	High yielding variety	Dolichos	1. Low yield	-	Popularization of Arka Jay high yielding variety.	1			5	0.74		-	-
15.	IPDM	Cabbage	1. Diamond Black Moth (DBM)	-	Integrated Pest Management in Cabbage	1		1	7	0.05		2 1	20 650 ml
16.	High yielding varieties	Aster	1. Smaller Flower Size and diameter 2. Dull colour and low yield	Assessment of HYV Phule Ganesh		3		1	12	0.015		-	-
17.	High yielding varieties	Fodder	1. Non Availability of Green Fodder	-	Enrichment of dry fodder			1	4	14000 root slips			

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

					No.of	programmes cond	ucted
S.No	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1.	Assessment of Groundnut varieties	UAS, Dharwad	Groundnut	5		2	
2.	Management of Collar rot disease in Groundnut	UAS,Bangalore and PDBC,Bangalore		3		1	
3.	Ground nut Decorticator	UAS, Bangalore			10	2	
4.	Enhancing the productivity in Red gram production system	UAS, Dharwad	Red gram	5		2	
5.	Safe Storage of Pulses				5	2	
6.	Assessment of Mucuna (Medicinal plant) as intercrop in Mango.	CHES, Hirehalli (IIHR,Bangalore)	Mucuna	4			
7.	Paired row with Zig zag and pit method of Planting in Banana	UAS, Bangalore, NRC on Banana, Thirchi and CARD KVK, Pattanamthitta, Kerala	Banana	3		2	
8.	Management of Nut Splitting in Arecanut	UAS, Bangalore, CPCRI, Kasaragod	Arecanut	5		2	

9.	Integrated Management of eriophid mite in	UAS, GKVK and	Coconut	2		-	
	Coconut	TNAU, CBE					
10.	Performance and assessment of tomato varieties	IIHR Bangalore,	Tomato	5		-	
		UAS,Bangalore					
		UAS, Dharwad					
11.	Assessment of microbial consortium for Tomato	IIHR,Bangalore,		5		-	
	production						
12.	ICM in Tomato	IIHR,Bangalore,			10	2	
13.	Performance of Assessment of China Aster	IIHR, Bangalore	China Aster	5		4	
	Varieties	MPKV, Rahuri					
14.	Management of Saline Soils	UAS, Bangalore	Paddy		10	1	
15.	Aerobic Paddy Cultivation	UAS, Bangalore			4	3	
16.	Ragi based sequential cropping system	UAS, Bangalore	Ragi		12	1	
17.	ICM in Maize	UAS, Bangalore	Maize		12	-	
18.	ICM in Mango	IIHR,Bangalore	Mango		10	3	
19.	Micro nutrient in Banana	IIHR,Bangalore	Banana		10	1	
20.	IDM in Arecanut	CPCRI, Kasargod	Arecanut		10	2	
21.	Enrichment of dry fodder		Fodder		7	1	
22.	IDM in Pomogranate	IIHR,Bangalore	Pomogranate		10	-	
23.	Popularization of Arka Jay variety	IIHR,Bangalore	Dolichos		10	1	
24.	IPM in Cabbage	IIHR,Bangalore	Cabbage		10	2	
25.	ICM in Brinjal	IIHR,Bangalore	Brinjal		10	2	
26.	Integrated Crop Management in Frenchbean	IIHR,Bangalore	Frenchbean		10	2	

# 3.B2 contd..

							No. of f	armers covere	ed						
		OFT				FLD			1	Training			Oth	ers (Specify)	
General	l	SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
Μ	F	М	F	М	F	М	F	Μ	F	М	F	М	F	М	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5								58	4						
4		1						28	5						
				8			2	38	8	4	2				
5								89	21	-	-				
					5			21	17	2	3				
5	-	-	-	-	-	-	-	-	-	-	-		-	-	-
3	-	-	-	-	-	-	-	44	-	7					
5	-	-	-	-	-	-	-	41	5	-	-	-			
2															
4		1													
3		2		Ì		Ì	Ì								
				8		2	1	50		3					
5								70			9				

		9	-	1	-	16	6	4	2		
		4				67	3	7	2		
		9		3		21	8		1		
		10		2							
		8		2		68	8	4	1		
		10				22		4			
		10				60	15	10			
		7				20	3	2	1		
		10									
		8		2		21	5	2			
		7		3		45	4	4			
		10				88	17				
		8		2		3	39		3		

# PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management					1			1		2
Varietal Evaluation		1			1		1			3
Integrated Pest Management		1						1		2
Integrated Crop Management			1			2				3
Total		2	1		2	2	1	2		10

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
Interneted Nutrient Management	Arecanut	Management of Nut Splitting in Arecanut	5	5	1
Integrated Nutrient Management	Tomato	Assessment of microbial consortium for tomato production	5	5	1
Varietal Evaluation	China Aster	Assessment of china aster varieties		5	1
	Groundnut	Assessment of Groundnut varieties	5	5	2
	Tomato	Performance and assessment of tomato varieties	5	5	1
Integrated Pest Management	Coconut	Integrated Management of eriophid mite in Coconut	2	2	3
Integrated Crop Management	Banana	Assessment of paired row and pit method of planting in Banana	3	3	1

	Redgram	Enhancing the productivity in Redgram production system Through transplanting	6	6	3.6
	Mango	Assessment of Mucuna (Medicinal plant) as intercrop in Mango	4	4	1
Integrated Disease Management	Groundnut	Management of Collar Rot disease in Groundnut	3	3	3.6
Total			43	43	12.6

## 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**

1. Banana

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data	on the pa	rameter		Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7		8			9	10	11	12
Banana	Irrigated	Less	Assessment	03	2.0 x1.2		To1	To2	To3	To4				
		population and low yield	of paired row and Pit method of planting		x1.2mt paired row 3.6 x 1.8 m pit method	No of fingers/bunch, bunch weight kg yield (t/ha)	126.6 19.2 34.3	127 19.8 33.5	129.2 18.6 41.4	125.6 16.3 36.2	Paired row has given higher yield, More no of fingers compare to others	-	-	-

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)	-	34.3t/ha	t/ha	103270	1.94
Technology option 2	UAS B	33.5 t/ha	t/ha	99836	1.49
Technology option 3	NRCB, Tiruchirapalli	41.4 t/ha	t/ha	124920	2.50
Technology option 4	NRCB, Tiruchirapalli	36.2 t/ha	t/ha	100390	2.10

#### 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 paired row and pit method of planting in banana

2 Problem Definition : Low population and yield

Source of technology

3 Details of technologies selected for assessment :

TO2 : 1.8 x1.8 mt TO3: 2.0x1.2x1.2 mt

TO4: 3.6 x1.8 mt

: NRCB, Tiruchirapalli

5 Production system and thematic area : Irrigated and Plant population

6 Performance of the Technology with performance indicators More no of fingers and higher yield (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 : Paired row with zigzag method

9 Constraints identified and feedback for research :

10 Process of farmers participation and their reaction : The assessed treatments performed very well when compared to farmers practice & High yielding ability

#### 2.China Aster

4

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameter s of assessment		Data on th	e parameter		Results of assessment	Feedback from the farmer	Any refinement needed	Justific ation for refinem ent
1	2	3	4	5	6	7			8		9	10	11	12
								No of flowers	Flower Diameter (g)	Yield (t/ha)	More No of	The assessed treatments performed		
China aster	Irrigated	Local variety & low yield	Assessment of china aster	05	Assessment of Kamini and	No of flowers	TO1:FP	28	4.40	2.62	flowers per plant and yield compare to farmers	very well when	NO	-
			varieties		PG-pink varieties	/plant Flower	TO2:	39.2	4.80	3.85	practice	compared to farmers		

			weight	TO3:	45	5.07	4.60	practice	
			Yield t /ha					High	
								yielding	
								ability and	
								Attractive	
								colour	

#### 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): Local variety	-	2.62	t/ha	49,725	2.70
Technology option 2 : Kamini	IIHR, Bangalore	3.85	t/ha	82,130	3.46
Technology option 3 : PG -pink	MPKV, Rahuri	4.60	t/ha	1,04,630	4.13

#### 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 China aster varieties

2. Problem Definition

- : Local Variety & low yield
- 3. Details of technologies selected for assessment

:	
Technology o	ption 1 (Farmer's practice): Local
variety	
Technology o	ption 2 : Kamini
Technology o	ption 3 : PG -pink
: IIHR Bangalore	& MPKV, Rahuri

4. Source of technology

5.

- Production system and thematic area : Irrigated and HYV
- 6. Performance of the Technology with performance indicators: No. of flowers per plant, Flower diameter and Yield (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: Kamini and PG pink performed well during the winter season
- 9. Constraints identified and feedback for research : Nil

10. Process of farmers participation and their reaction: The assessed treatments performed very well when compared to farmers practice & High yielding ability and Attractive colour

3.Redgram

Crop/ enterpris e	Farming situation	Problem definition	Title of OFT	No . of tri als	Technology Assessed	Paramete rs of assessmen t		Data on the	parameter		Results of assessment	Feedback from the farmer	Any refinement needed	Justifi cation for refine ment 12
1	2			5		1		Plant populati on	Plant height	Yield (kg/ha)	Higher yield is obtained in the	It is	11	Cost
Redgram	Rainfed	Low yield	Enhancing productivity	06	T1: Direct sowing at 60x15 cm	No of flowers	TO1:FP	84573	146.8	1317	recommended practice (TO2)	practically impossible do it. is	Direct sowing at	of transpl
			in Redgram production		T2: Direct sowing at 90x15 cm	/plant Flower	TO2 :	69474	153.0	1583	as it has higher plant	difficult to poor	90x15 cm and raising	anting will be reduce
			system through transplanting		T3:Transplanting at 120x30cm T4: Transplanting	weight Yield t /ha	TO3 :	27763	162. 2	1327	population. Among transplanting	farmers follow it as transplantin	some seedlings for gap	d and easy for
					at 120x45 cm		TO4 :	22135	166. 8	1489	method transplanting at 120x45 cm is good	g cost is involved.	filling	gap filling

#### 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 : Direct sowing at 60x15 cm	-	1317	kg/ha	40,580	3.35
Technology option 2 : Direct sowing at 90x15 cm	UAS Bangalore	1583	Kg/ha	48,670	3.32
Technology option 3 : Transplanting at 120x30cm	UAS Dharwad	1327	Kg/ha	36,330	2.17
Technology option 4 : Transplanting at 120x45 cm	UAS Dharwad	1489	Kg/ha	43,460	2.69

#### 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
- 2. Problem Definition
- 3. Details of technologies selected for assessment

: Enhancing productivity in Red gram production system through transplanting  $% \mathcal{A} = \mathcal{A} = \mathcal{A}$ 

: Low yield :

•
Technology option 1 (Farmer's practice): Direct sowing at 60x15 cm
Technology option 2 : Direct sowing at 90x15 cm
Technology option 3 : Transplanting at 120x30cm
Tec hnology option4: Transplanting at 120x45 cm

#### 4. Source of technology

: UAS,Banglore and UAS, Dharwad : Rainfed

- 5. Production system and thematic area
- 6. Performance of the Technology with performance indicators: Higher yield is obtained in the recommended practice (TO2) as it has higher plant population. Among transplanting method transplanting at 120x45 cm is good
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : It is practically impossible do it. is difficult to poor farmers follow it as transplanting cost is involved.
- 8. Final recommendation for micro level situation: Nil
- 9. Constraints identified and feedback for research: Transplanting cost is higher
- 10. Process of farmers participation and their reaction: it is accepted by the farmers and they are interested in direct sowing along with raising some seedling for gap filling.

#### 4. Mucuna

Crop/ enterpr ise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Param eters of assess ment	Γ	Data on the para	ameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justificati on for refinemen t
								8		9	10	11	12
1	2	3	4	5	6	7		<b>Bio-Mass</b>	Yield (kg/ha)		T (		
Mucun a	Rainfed	Low yield	Assessment of Mucuna	4	T1: Mango + Ragi	Seed Product	TO1:FP	4 ton	1100 kg	Higher yield is	Low cost technology is (TO3)		
			(Medicinal Plant) as		T2: Mango + Cowpea	ion and	TO2 :	6 ton	280 kg	obtained along with Bio-Mass in (TO 3) the compared to	with minimal	Nil	Nil
			intercrop in Mango		(Pulses) T3: Mango + Mucuna	Bio - Mass	TO3 :	9 ton	1215	TO1	inputs		

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 : Mango + Ragi	-	1100 kg	kg/ha	4900	0.98
Technology option 2 : Mango + Cow Pea	UAS Bangalore	280 kg	Kg/ha	2800	1.0
Technology option 3 : Transplanting at 120x30cm	IIHR,Bangalore CHES,Hirehalli	1215 kg	Kg/ha	28250	3.44

#### 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
- 2. Problem Definition
- 3. Details of technologies selected for assessment

: Assessment of Mucuna (Medicinal Plant) as intercrop in Mango

: Low yield

•

•
Technology option 1 (Farmer's practice): Mango + Ragi
Technology option 2 : Mango + Cow Pea
Technology option 3 : Mango + Mucuna

- 4. Source of technology
- 5. Production system and thematic area

6. Performance of the Technology with performance indicators: Higher yield is obtained along with Bio-Mass in (TO 3) the compared to TO1

: Rainfed

- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Low cost technology is (TO3) with minimal inputs
- 8. Final recommendation for micro level situation: Nil
- 9. Constraints identified and feedback for research: Climber spread to Mango trees
- 10. Process of farmers participation and their reaction: It is accepted by the farmers but they look for buy back system for seeds and suggested by farmers it is good for organic farming.

: UAS, Bangalore and IIHR, Bangalore (CHES, Hirehalli)

#### 5. Groundnut

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parame ters of assessm ent		Data on t	he parameter		Results of assessment	Feedback from the farmer	Any refineme nt needed	Justificati on for refineme nt
1	2	3	4	5	6	7			8		9	10	11	12
					-		Technol ogy Options	% Disease incidence	% Discolo red Seeds	% Yield (Kg/ha)	Less disease incidence and increased	1.Effectiv e control of disease and		
Ground Nut	Dry land	Severe incide nce of Collar rot	Manag ement of collar rot	3	Recommen ded practice: ST with Trichoderm	Per cent Disea ses incid	Techn ology Optio n I	39.04	23.08	568	yield	higher yield 2. Pseudomo nas	Nil	Nil
			disease in ground nut		a @ 4g/kg. ST with <i>Pseudomon</i> as	ence. Per cent	Techn ology Optio n II	23.01	14.05	842		culture should be made available	INII	NII
					<i>fluorescens</i> @4g/kg seeds & soil	Disc olore d seeds	Techn ology Optio n III	12.01	7.50	1083				

	treatment with Pseudomon as @ 2.5kg & Neemcake @ 2.5q with FYM 5 tons/ha.	Per cent Yield						
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Contd..

Technology Assessed	Source of Technology	Production (Kg/ha )	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): Nil	Nil	568	Kg/ha	-	
Technology option 2: ST with <i>Trichoderma</i> @ 4g/kg.	UAS, Bangalore	842	Kg/ha	1288.00	
Technology option 3: ST with <i>Pseudomonas</i> flouroscense @4g/kg seeds & soil treatment with <i>Pseudomonas</i> @ 2.5kg & neemcake @ 2.5q with FYM 5 tons/ha.	PDBC, Bangalore	1183	Kg/ha		

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: Management of collar rot disease in groundnut
- 2. Problem Definition : It mainly affects the trunk/stem portion of the plant. Rotting of the plant causes hindering the upward translocation. Since economic portion of the plant inside the soil and remain in the soil at the time of harvest.
- 3. Details of technologies selected for assessment: Technology Option 1 : Farmer's practice: Nil

Technology Option 2 :

Recommended practice: ST with Trichoderma @ 4g/kg.

- Extent of adoption : 40-50%
- Source : UAS, Bangalore

Reason of no/ low adoption : In efficiency of present bio agent alone

Technology Option 3: Assessment: ST with Pseudomonas fluorescence @4g/kg seeds & soil treatment with Pseudomonas @ 2.5kg & neemcake @ 2.5q with FYM 5 tons/ha.

Justification : In addition to the disease management it protects the crop throughout the cropping period

- Source : PDBC, Bangalore
- 4. Source of technology: PDBC, Bangalore
- 5. Production system and thematic area: Rain fed situation and Disease management
- 6. Performance of the Technology with performance indicators: The lowest disease incidence and yield was recorded in Tech.Option-III(12.01% and ) compared to Farmers practice(39.04%) and yield was 1083 kg/ha and 568 Kg/ha respectively.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:
- 8. Final recommendation for micro level situation: ST with Pseudomonas fluorescence @4g/kg seeds & soil treatment with Pseudomonas @ 2.5kg & neemcake

@ 2.5q with FYM 5 tons/ha.

- Constraints identified and feedback for Research: 9.
- 10. Process of farmers participation and their reaction: There are several farmers were actively involved in group meetings as well as results demonstration and opinioned that the technology

was	very usefu	l in controllii	ng the disease.
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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	
								No of Pods/plant	Test weight(g)	Yield (kg./ha)	GPBD-5	GPBD-5 seed has		
Ground nut	Rain fed	Old variety, low yield	Evaluation of	05	Assessment of TMV-	No of pods/plant,	TO1:FP ,TMV-2	14.1	33.2	2162	Variety performed better with more	got lesser dormancy,		
		and small size kernals	groundnut varieties		2,GPBD-4 and GPBD-5 varieties	yield and economics	TO2: GPBD- 4	16.2	36.1	2361	test weight compared to	because of which germination	NO	-
							TO3: GPBD- 5	16.5	39.6	2418	other two varieties	is noticed because of delayed harvest		

#### 6. Ground nut

#### Contd..

2.

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): TMV-2	-	2162	Kg/ha	18254	2.10
Technology option 2 : GPBD-4	UAS,Dharwad	2361	Kg/ha	19540	2.32
Technology option 3 : GPBD-5	UAS,Dharwad	2418	Kg/ha	20547	2.34

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

Title of Technology Assessed 1. Problem Definition

- : Assessment of TMV-2,GPBD-4 and GPBD-5 varieties : low yield and lower test weight
- 3. Details of technologies selected for assessment

	Technology option 1 (Farmer's practice): TMV-2
r	Technology option 2 : GPBD-4
r	Technology option 3 : GPBD-5

Source of technology 4.

- : UAS, Dharwad : Rainfed and HYV
- Production system and thematic area 5.
- Performance of the Technology with performance indicators: No.of pods/Plant, Test weight, Yield in kg/ha 6.
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques 7.
- Final recommendation for micro level situation: GPBD-4 and GPBD-5 Performed well with better test weight, 8.
- 9. Constraints identified and feedback for research : Nil
- 10. Process of farmers' participation and their reaction: GPBD-5 Variety performed better with more test weight compared to other two varieties, GPBD-5 seed has got lesser dormancy, because of which germination is noticed because of delayed harvest

#### 7. Tomato

Crop/ enterp rise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameter s of assessment	Data on the parameter			Results of assessment	Feedback from the farmer	Any refinement needed	Justificat ion for refineme nt
1	2	3	4	5	6	7		8		9	10	11	12
								No.of Fruits/Plant	Fruit Yield (tons./ha)				
Tom ato	Rain fed	Low yield	Assessment of tomato	05	Assessment of DMT2, Vaibhav,	No of Fruits/pl	TO1:FP local variety	36.2	20.1	Meghali performed better			
			varieties for rain fed		Meghali	ant, Fruit yield(ton	TO2: DMT- 2	56.7	26.74	than other varieties including		NO	-
			situation.			s/ha)	TO3: Vaibhav	41.64	19.65	check			
							T04:Arka Meghali	57.16	27.64				

#### 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): Local variety	-	20.1	Ton/ha	35300	2.412
Technology option 2 : DMT-2	UAS,Dharwad	26.74	Ton/ha	55220	3.200
Technology option 3 : Vaibhav	UAS,Bangalore	19.65	Ton/ha	33950	2.358
Technology option 3 : Arka Meghali	IIHR Bangalore	27.64	Ton/ha	57920	3.316

#### 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 DMT-2, Vaibhav and Meghali varieties

2. Problem Definition

- : low yield in Rainfed situation
- 3. Details of technologies selected for assessment

Technology option 1 (Farmer's
practice): Local variety
Technology option 2 : DMT-2
Technology option 3 : Vaibhav
Technology option 3 : A.Meghali

4. Source of technology

: UAS, Dharwad, UAS Bangalore and IIHR Bangalore

- 5. Production system and thematic area : Rainfed and HYV
- 6. Performance of the Technology with performance indicators: No. of Fruits/Plant, Yield in tons/ha
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8. Final recommendation for micro level situation: DMT-2 and Arka Meghali gave better yield compared to other varieties

:

- 9. Constraints identified and feedback for research : Nil
- 10. Process of farmers' participation and their reaction:

#### 8. Tomato

Crop/ enterpri se	Farming situation	Problem definition	Title of OFT	No. of trial s	Technology Assessed	Parameter s of assessmen t	Data on the parameter			Results of assessment	Feedback from the farmer	Any refinement needed	Justific ation for refinem ent	
1	2	3	4	5	6	7		8			9	10	11	12
								TO1-FP	TO2-RP	ТОЗ-АР				
Tomat 0	Irrigated	Low nutrient use	Assessment of microbial	5	Assessment of microbial	No of Fruits/plan	No.of fruits/plant	40.6	43.2	47.4	Use of Microbial	Reduce the		
		efficiency, poor soil	consortium for Tomato		consortium specific to	t, yield/plant,	Yield/plant (kg)	2.2	2.8	3.1	Consortium Supply of	usage of chemical	NO	-
		fertility, low yield	Production		Tomato	Fruit yield(tons/ ha)	Avg. fruit weight (gms)	28.5	35	38	nutrients and increase the yield of plants	fertilizers and pesticides.		
						Avg. fruit weight	Yield /Ha	42.2	46.56	52.2				

#### 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):	-	42.2	Ton/ha	90350	3.4
Technology option 2 : RP	IIHR,Bangalore	46.56	Ton/ha	101860	3.69
Technology option 3 : AP	IIHR, Bangalore	52.2	Ton/ha	132760	4.8

#### 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 microbial consortium for tomato production

- Problem Definition 2.
- 3. Details of technologies selected for assessment
- : Low nutrient use efficiency, poor soil fertility, low yield

•	
Technology option 1 (Farmer's practice):	
Complex fertilizers -2 bags	
Technology option 2 : FYM 25t/ha+ RDF	
180:100:60 NPK kg/ha	
Technology option 3 : FYM 25t/ha+ RDF	
135:75:60 NPK kg/ha + Microbial consortium	
5kg/ha	
	_

Source of technology 4.

- : IIHR Bangalore
- 5. Production system and thematic area : Irrigated and INM
- Performance of the Technology with performance indicators: No. of Fruits/Plant, Yield in tons/ha 6.
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques 7.
- Final recommendation for micro level situation: Combined use of microbial consortium to Tomato increases the Nutrient use efficiency and yield of plant resulting it reduces the application 8. of inorganic fertilizers and pesticides
- 9. Constraints identified and feedback for research : Nil
- 10. Process of farmers' participation and their reaction:

# 9.Coconut

Crop/ enterpri se	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter				Results of assessme nt	Feedback from the farmer	Any refineme nt needed	Justi ficati on for refin eme nt
1	2	3	4	5	6	7	8	9	10	11	12			
Coconut	Dry land	Incidence of mites	Integrated management of Eriophid mite in coconut	2	Technology Option I: *Application of 20-25kg of FYM/palm, *250 gm/palm complex fertilizer. Technology Option II: *50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm, 50 g borax / palm / year, 50g MgS04 / palm / year, Eco neem Plus 1% (10ml/palm, 3 times / year) Technology Option III: *50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm Nutritional tonic (250 ml / palm twice a year at 6 months interval)	Per cent Damage. Per cent Damage grade Yield/ Palm/Year	Technolo gy Options Technolo gy Option I Technolo gy Option II Technolo gy Option III	Per cent Damage 71.05 38.06 34.05	Per cent Damage grade 4.11 2.86 2.11	11         Yield/         100Palm         /Year         7700         12700         14200	Less mite infestatio n and increased yield	Coco tonic should made available in all pesticides shop	Nil	Nil

Contd..

Technology Assessed	Source of Technology	Production (Kg/ha )	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 I : *Application of 20-25kg of FYM/palm,*250 gm/palm complexfertilizer.	Nil	7700	nuts/100 palm/year	31900.00	1: 4.83
<b>Technology Option II :</b> *50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm, 50 g borax / palm / year, 50g MgS04 / palm / year, Eco neem Plus 1% (10ml/palm, 3 times / year)	UAS, Bangalore	12700	nuts/100palm/year	64100.00	1: 5.90
<b>Technology Option III:</b> *50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm Nutritional tonic (250 ml / palm twice a year at 6 months interval).	TNAU, CBE	14200	nuts/100palm/year	86100.00	1: 6.47

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 : Integrated management of Eriophid mite in coconut

2. Problem Definition : Severe mite incidence results in quality deterioration of nuts.

3. Details of technologies selected for assessment:

Technology Option I: \*Application of 20-25kg of FYM/palm, \*250 gm/palm complex fertilizer.

Technology Option II: \*50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm, 50 g borax / palm / year, 50g MgS04 / palm / year,

Eco neem Plus 1% (10ml/palm, 3 times / year)

Technology Option III: \*50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm Nutritional tonic (250 ml / palm twice a year at 6 months interval)

4. Source of technology: TNAU,CBE

- 5. Production system and thematic area: Rain fed situation and Pest management
- 6. Performance of the Technology with performance indicators: Highest returns obtained in the Tech. option III(Rs.86100.00) compared to Farmers practice (Rs.31900.00)
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:
- 8. Final recommendation for micro level situation: \*50 kg FYM, 500:320:1200g NPK per palm / year, 5 Kg Neem cake / palm Nutritional tonic (250 ml / palm twice a year at 6 months interval)
- 9. Constraints identified and feedback for Research: Uniform method of management of pests was not followed by cluster of peoples.
- 10. Process of farmers participation and their reaction: There are several farmers were actively involved in group meetings as well as results demonstration and opinioned that the technology should be followed by all individual farmers for effective control of pests.

#### 10. Arecanut

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trial s	Technology Assessed	Paramete rs of assessme nt	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinemen t needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Arecanut	Irrigated	Nut splitting and yield loss	Management of nut splitting in Arecanut	5	Application of Borax	% of nut splitting , Bunch weight /palm, Yield (t/ha)	In progress				

#### 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):	-				
Technology option 2 : RP	UAS,Bangalore				
Technology option 3 : AP	CPCRI, Kasargod				

#### 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

Management of nut splitting in ArecanutNut splitting, yield loss

- 2. Problem Definition
- 3. Details of technologies selected for assessment

:	
	Technology option 1 (Farmer's practice):
	FYM application + Complex fertilizers -2
	bags
	Technology option 2 : FYM 12kg/tree +RDF
	100:40:140 NPK gm/tree
	Technology option 3: FYM 12kg/tree +RDF
	100:40:140 NPK gm/tree +Borax 30 gm

4. Source of technology

- : UAS, Bangalore and CPCRI, Kasargod
- 5. Production system and thematic area : Irrigated and INM
- 6. Performance of the Technology with performance indicators: % of nut splitting, bunch weight/palm, yield(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: Combined use of microbial consortium to Tomato increases the Nutrient use efficiency and yield of plant resulting it reduces the application of inorganic fertilizers and pesticides
- 9. Constraints identified and feedback for research : Nil
- 10. Process of farmers' participation and their reaction:

# **Results of On Farm Trial -Nil**

# PART V - FRONTLINE DEMONSTRATIONS

### 5.A. Summary of FLDs implemented during 2010-11

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)			. of farme monstrati	on	Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
1	Cereals	Rainfed	Kharif 2010	Paddy	MAS- 946-1		ICM	Aerobic Paddy cultivation	1.0	1.0		4	4	
		Irrigated	Kharif 2010	Paddy	IR30864		ICM	Management of Saline Soils	2	2	1	9	10	
		Irrigated	Kharif 2010	Maize	NAH- 1137		ICM	ICM in Maize	5	5	2	10	12	
2	Millets	Rainfed	Kharif 2010	Cow pea - Ragi	C-152 ML-365		Cropping System	Sequential cropping of Cowpea followd by Ragi	5	5	3	9	12	
3	Vegetables	Irrigated	Rabi- 2010	Brinjal		Arka- Anand	ICM	ICM in Brinjal	1	1		10	10	
		Rainfed	Kharif 2010	Tomato		Arka ananya	ICM	ICM in Tomato	2	2	2	8	10	
		Irrigated	Kharif 2010	Frenchbean	Arka Suvidha		ICM	ICM in Frenchbean	2	2	2	8	10	
		Irrigated	Rabi 2010	Dolichos	Arka Jay		Popularization of variety	Popularization of Arka Jay	2	2	2	8	10	
		Irrigated	Rabi 2010	Cabbage	Unnathi		IPM	IPM in Cabbage	2	2	3	7	10	
4	Fruit	Rainfed	Summer 2011	Mango	Alphanso		ICM	ICM in Mango	2	2	2	8	10	
		Irrigated	Kharif 2010	Banana	G-9 and Yelliki		INM	INM in Banana	2	2		10	10	
		Irrigated	Rabi 2010	Pomogranate	Bhagava		IDM	IDM in Pomogranate	2	2		10	10	
5	Fodder	Irrigation	Kharif 2010	Fodder crops	Co-3		Fodder production	Introduction of CO-3 variety	0.5	0.5		7	7	
6	Plantation	Rainfed/ Irrigated	Kharif 2010	Arecanut	Hirehalli Tall		IDM	IDM in Arecanut	100 palms	100 palms		10	10	

	Implements (Groundnut Decorticator)	Rainfed	Rabi 2010	Ground nut	GPBD-4	Drudgery	Ground nut Decorticator	10 units	3 units	2	8	10	Unit cost was exceeded than
7	Others (specify)	Rainfed	Summer 2011	Redgram	Local	РНТ	Safe storage of pulses	5 units	5 units		5	5	proposed

### 5.A. 1. Soil fertility status of FLDs plots during 2010-11

Sl. No.	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and	2	Status of	Previous crop grown	
1	0.1		Year	-				0.	year	Ν	Р	Κ	
1	Cereals	Rainfed	Kharif 2010	Paddy	MAS-946- 1		ICM	Aerobic Paddy cultivation	Kharif 2010	М	L	М	Horsegram
		Irrigated	Kharif 2010	Paddy	IR30864		ICM	Management of Saline Soils	Kharif 2010	М	L	М	Diancha
		Irrigated	Kharif 2010	Maize		NAH- 1137	ICM	ICM in Maize	Kharif 2010	М	L	М	Dolichos
2	Millets	Rainfed	Kharif 2010	Cow pea - Ragi	C-152 ML-365		Cropping System	Sequential cropping of Cowpea followed by Ragi	Kharif 2010	М	L	М	Cowpea
3	Vegetables	Irrigated	Rabi- 2010	Brinjal		Arka- Anand	ICM	ICM in Brinjal	Rabi- 2010	М	L	М	Ragi
		Rainfed	Kharif 2010	Tomato		Arka ananya	ICM	ICM in Tomato	Kharif 2010	М	L	М	-
		Irrigated	Kharif 2010	Frenchbean	Arka Suvidha		ICM	ICM in Frenchbean	Kharif 2010	М	L	М	Tomato
		Irrigated	Rabi 2010	Dolichos	Arka Jay		Popularization of variety	Popularization of Arka Jay	Rabi 2010	М	L	М	Ragi
		Irrigated	Rabi 2010	Cabbage	Unnathi		IPM	IPM in Cabbage	Rabi 2010	М	L	М	Maize
4	Fruit	Rainfed	Summer 2011	Mango	Alphanso		ICM	ICM in Mango	Summer 2011	М	L	М	-
		Irrigated	Kharif 2010	Banana	G-9 and Yelliki		INM	INM in Banana	Kharif 2010	М	L	М	Tomato an d Aster
		Irrigated	Rabi 2010	Pomogranate	Bhagava		IDM	IDM in Pomogranate	Rabi 2010	М	L	М	
5	Fodder	Irrigation	Kharif 2010	Fodder crops	Co-3		Fodder production	Introduction of CO-3 variety	Kharif 2010	М	L	М	
6	Plantation	Rainfed/ Irrigated	Kharif 2010	Arecanut	Hirehalli Tall		ÎDM	IDM in Arecanut	Kharif 2010	М	L	М	
7	Others	Rainfed	Rabi 2010	Ground nut	GPBD-4		Drudgery	Ground nut Decorticator	Rabi 2010				
8	Others	Rainfed	Summer 2011	Redgram	Local		PHT	Safe storage of pulses	Summer 2011				

# 5.B. Results of Frontline Demonstrations

### 5.B.1. Crops

<b>5.D.1.</b> CTU	Name of the	Variata	Hybrid	Farming situation	No. of Demo.	Area	Yield (q/ha)				%	*Ecc	nomics of (Rs./	demonstrat ha)	ion	*Economics of check (Rs./ha)			
Crop	technology demonstrated	Variety	пурпа			(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals	Aerobic Paddy Cultivation	MAS- 946-1		Rainfed	05	1.0	51.2	41.5	45.2	42.5	6.35	16500	45200	28,700	1.74	20500	42500	22000	1.10
Paddy	Management of Saline Soils	IR-30864		Irrigated	10	2	39.6	35.2	38.3	33.1	15.7	26504	49470	22966	1.87	23976	39750	15774	1.66
	ICM in Maize		NAH 1137	Irrigated	12	5	63	50.3	56.2	52.6	6.84	13800	50580	36780	3.66	13200	47340	34140	3.58
Millets	Sequential cropping of Cowpea followed by Ragi	C-152 & ML-365		Rainfed	12	05	Cow pea 6.5& Ragi 22.6	5.9 18.7	Cow pea 6.2 & Ragi 20.3	15.8	20.1	16,800	48,398	31,598	1.88	6080	15,800	9,720	1.60
Vegetables	ICM in	_	Arka	Irrigated	5	1	295	216	259.6	221	17.46	32750	181720	148970	5.54	29750	132600	102850	4.40
	Brinjal IPM in Cabbage	-	Anand Unnati	Irrigated	10	2	22.2	15.4	18.2	15.8	18.18	33000	127400	94400	3.9	29800	102700	72900	3.44
	ICM in French Bean	A.Suvidha		Irrigated	10	2	181.2	124.2	161.8	121.4	20.38	21342	80900	59558	3.79	17245	60700	43455	3.51
	ICM in Tomato		Arka Ananya	Irrigated	10	2	542.4	356.8	516.1	345.7	49.29	38421	154830	96589	4.02	34214	103710	69496	3.03
	Popularization of Arka jay	Arka jay		Rainfed	10	2	141.5	94.2	130.1	84.7	53.6	18345	65050	46705	3.5	17504	42350	24846	2.41
Fruit	ICM in Mango	Alphonso	-	Rainfed	05	01					Dem	o is in pro	gress Resu	lts awaited					
	IDM in Pomogranate	Bhagwa	-	Irrigated	2	2.00	9.23	7.81	8.52	2.35		85000	681600	596600		78000	211500	133500	2
	Micronutrient in Banana	G-9		Irrigated	10	2	38.1 t/ha	35.9 t/ha	37 t/ha	31.5t/ha	17.46	93500	135864	42364	1.45	88000	113886	25886	1.29
Fodder	Introduction of CO-3 fodder variety	Co-3		Irrigated	05	0.5	On going												
Plantation	IDM in Arecanut	Local		Irrigated	10	100 palms						C	n going						
Others -Safe	Safe storage		-	Rainfed															
storage method	method of pluses	Red gram			05	05	- On going												
	1																		

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

#### 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

Name of the	Cost of the	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha		oour requirement in Mandays		Savings in labour	*Econon	Rs./ha)	) *Economics of check (Rs./ha)					
implement	implement in Rs.				Demo	Check	save	(Rs./ha)	Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Ground nut decorticator	3000	Ground nut decorticator	3		1	9	88	Rs.800/qt	-	-	-	-	-	-	-	-

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

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

	Data on other parameters in relation to technology demonstrated										
Parameter with unit	Parameter with unit Demo Local										
Ground nut decorticator (seed damage %)	10	3									

5.B.6. Cotton

#### 5.B.6.1.Summary of demonstrations conducted under FLD cotton

S1. No.	Category	Technology Demonstrated	Variety	Hybrid	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
NO.						Proposed	Actual	SC/ST	Others	Total	
	Production Technology										
	IPM										
	Farm Implements										

#### 5.B.6.2 Production technology demonstrations-Nil

#### Performance of demonstrations-Nil

Performance of Bt hybrids, Desi hybrids, non-Bt hybrids and Varieties in Front Line Demonstrations in cotton during 2010-11-Nil

#### 5.B.6.3 Integrated pest management demonstrations-Nil

5.B.6.4 Demonstrations on farm implements-Nil

#### 5.B.6.5 Extension Programmes organized in Cotton Demonstration Plots-Nil

S. No	Crop /	Name of the technology demonstrated	Feed Back
	Enterprise		
1.	Groundnut	Ground nut Decorticator	Decorticator should be mechanized
2.	Tomato	ICM in Tomato	Need for development of shelf life varieties and suitable for long distance transport
3.	Paddy	Management of Saline Soils	Need for development of resistant varieties to saline soils
4.	Paddy	Aerobic Paddy Cultivation	Popularization and Timely availability of seeds
5.	Maize	ICM in Maize	Need for development of dual purpose varieties baby corn and seeds
6.	Arecanut	IDM in Arecanut	Need to create the awareness among the farmers on management of anabe roga
7.	Pomogranate	IDM in Pomogranate	Need for development of low cost effective technology for bacterial blight of Pomogranate
8.	Dolichos	Popularization of Arka Jay variety	Need for high yielding rust resistance varieties
9.	Brinjal	ICM in Brinjal	Need of development of wilt resistance in bottle brinjal
10.	Frenchbean	Integrated Crop Management in Frenchbean	Need for rust resistance varieties

#### 5.B.6.6Technical Feedback on the demonstrated technologies on all crops / enterprise

#### 5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Aerobic cultivation	Non availability of timely supply of seeds
			Technology of cone-weeder need to be upgraded
			Resistance varieties
2	Mango	ICM	Need of regular bearing technology instead of alternate bearing of fruits
3	Groundnut	Groundnut	Plates needs to be size specific and use of rust proof or steel once.
4	Tomato	ICM in Tomato	Expressed good opinion about the hybrid and its performance which yielded higher than local
			varieties by adopting package of practices
5	Paddy	Management of Saline Soils in Paddy	Expressed good opinion about IR 30864 Salt tolerant variety which yield more than local
			varieties and also application of daincha improves the soil structure
6	Maize	ICM in Maize	Need for timely supply of seed and at subsidies rates
7	Arecanut	IDM in Arecanut	Cluster approach and effective plant protection measures should be provided
8	Pomogranate	IDM in Pomogrante	By practicing recommended IDM practices can be mimize the blight disease
9	Dolichos	Popularization of Arka Jay	Arka Jay found to be performed better than other dolichos
10	Brinjal	ICM	By adopting ICM technology effectively managed shoot and fruit borer, as well as wilt at the
			same time we can reduce the cost of cultivation without affecting the yield levels.
11	Frenchbean	ICM in French Bean	Fibre less fetched more price in the market and no. of picking can be delayed

5.B.6.8 Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	3	95	
2	Farmers Training	30	813	-
3	Media coverage	20	-	-
4	Training for extension functionaries	4	112	-

#### PART VI – DEMONSTRATIONS ON CROP HYBRIDS

#### Demonstration details on crop hybrids

Type of Breed	Name of the technology	Name of the	No. of	Area	Yield (q/ha)				%	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
Type of Breed	demonstrated	hybrid	Demo	(ha)		Demo		Check	Increase	Gross	Gross	Net	**	Gross	Gross	Net	**
								eneen		Cost	Return	Return	BCR	Cost	Return	Return	BCR
					Н	L	Α										
Cereals																	
Bajra																	
Maize	ICM in Maize	NAH 1137	12	5	63	50.3	56.2	52.6	6.84	13800	50580	36780	3.66	13200	47340	34140	3.58
Vegetable																	
crops																	
Tomato	ICM in Tomato	Arka Ananaya	10	2	542.4	356.8	516.1	345.7	49.29	38421	154830	96589	4.02	34214	103710	69496	3.03
Cabbage	IPM in Cabbage	Unatti	10	2	22.2	15.4	18.2	15.8	18.18	33000	127400	94400	3.9	29800	102700	72900	3.44
Brinjal	ICM in Brinjal	Arka Anand	10	1	295	216	259.6	221	17.46	32750	181720	148970	5.54	29750	132600	102850	4.40
Total			42	10	380.2	281.7	334	262.4	42.48	79550	359700	280150	13.1	72750	282640	209890	11.42

H-High L-Low, A-Average

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

#### PART VII. TRAINING

#### 7.A.. Farmers' Training including sponsored training programmes (On campus)

	No. of	No. of Participants												
Area of training	Courses	Conorol			SC/ST				Grand Total					
	courses	Male	Female	Total	Male	Female	Total	Male	Female	Total				
Horticulture														
a) Vegetable Crops														
Production of low value and high volume crop	1	21	5	26	2	-	2	23	5	28				
Others (pl.specify)	1	26	-	26	3	-	3	29	-	29				
Seed Production in Vegetables														
b) Fruits														

Cultivation of Fruit	1	13	-	13	2	-	2	15	-	15
Nursery Management	1	8	2	10	-	-	-	8	2	10
Soil Health and Fertility Management										
Integrated nutrient management	2	48	-	48	4	-	4	52	-	52
Production and use of organic inputs										
Management of Problematic soils	1	16	6	22	4	2	6	20	8	28
Value addition	1	-	22	22	-	3	3	-	25	25
Women empowerment										
Location specific drudgery production										
Integrated Disease Management	1	28	-	28	3	-	3	31	-	31
TOTAL	9	160	35	195	18	5	23	178	40	218

#### 7.B.. Farmers' Training including sponsored training programmes (Off campus)

	No. of	No. of Participants											
Area of training	Courses		General			SC/ST			Grand Total				
		Male	Female	Total	Male	Female	Total	Male	Female	Total			
Crop Production													
Resource Conservation Technologies													
Cropping Systems	1	20	3	23	5	2	7	25	5	30			
Seed production	2	91	15	106	2	-	2	93	15	108			
Nursery management													
Integrated Crop Management	2	47	6	53	3	-	3	50	6	56			
Others (pl.specify)-Organic Farming in Oil Seed Crops	1	24	4	28	5	2	7	29	6	35			
Horticulture													
a) Vegetable Crops													
Production of low value and high volume crop	1	24	6	30	-		-	24	6	30			
Off-season vegetables	2	65	43	108	-	2	2	65	45	110			
Others (pl.specify)-ICM in Cole Crops	1	24	2	26	3	-	3	27	2	29			
b) Fruits													
Cultivation of Fruit	1	37	5	42	-	-	-	37	5	42			
Management of young plants/orchards	1	18	3	21	2	1	3	20	4	24			
c) Ornamental Plants													

Nursery Management	1	9	3	12	-	-	-	9	3	12
Management of potted plants										
Export potential of ornamental plants	1	28	2	30	-	-	-	28	2	30
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	-	22	22	-	8	8	-	30	30
Storage loss minimization techniques	1	19	6	25	1	2	3	20	8	28
Value addition										
Women empowerment	1	-	28	28	-	2	2	-	30	30
Women and child care	1	-	25	25	-	1	1	-	26	26
Agril. Engineering										
Post Harvest Technology	2	38	8	46	4	2	6	42	10	52
Plant Protection										
Integrated Pest Management	2	53	4	57	-	-	-	53	4	57
Integrated Disease Management	3	81	18	99	9	1	10	90	19	109
TOTAL	27	623	210	833	34	23	57	657	233	890

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

	No. of	No. of Participants												
Area of training	Courses		General			SC/ST			Grand Total					
		Male	Female	Total	Male	Female	Total	Male	Female	Total				
Seed production	2	26	11	37	3	1	4	29	12	41				
TOTAL	2	26	11	37	3	1	4	29	12	41				

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

	No. of		No. of Participants									
Area of training	Courses		General			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Post Harvest Technology	1	3	11	14	1	1	2	4	12	16		
Any other (pl.specify) Health and hygiene education to rural youth	1		55	55		6	6		61	61		
TOTAL	2	3	66	69	1	7	8	4	73	77		

#### **7.E.** Training programmes for Extension Personnel including sponsored training programmes (on campus)

	No. of				No. o	of Participants				
Area of training	Courses		General			SC/ST		Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	2	43	7	50	6		6	49	7	56
Protected cultivation technology	1	20	3	23	2	1	3	22	4	26
Low cost and nutrient efficient diet designing	1		28	28		2	2		30	30
Total	4	63	38	101	8	3	11	71	41	112

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

	No. of		No. of Participants									
Area of training	Courses		General			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Livestock feed and fodder production	1	20	3	23	2	1	3	22	4	26		
Household food security												
Others-Production Technology of Fruit Crops	1	19	1	20	6	2	8	25	3	28		
Total	2	39	4	43	8	3	11	47	7	54		

#### 7.G. Sponsored training programmes-Nil

#### 7.H. Details of vocational training programmes carried out by KVKs for rural youth

C N.		No. of	No. of Participants								
S.No.	Area of training	Courses		General			SC/ST			Grand Total	
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Post harvest technology and value addition										
1.a.	Value addition	1	-	30	30	-	-	-	-	30	30
	Grand Total	1		30	30					30	30

#### PART VIII – EXTENSION ACTIVITIES

#### Extension Programmes (including activities of FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of	Participants (Ge	neral)	N	o. of Participant SC / ST	ts	No.of	extension perso	onnel
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	2	160	20	180	9	5	14	6	4	10
Exhibition	10	19994	6980	26974	56	30	86	908	271	1179
Workshop	2	90	22	112	5	3	8	15	10	25
Group meetings										
Lectures delivered as resource persons	16	769	219	988	7	5	12	62	14	76
Newspaper coverage	5									
Radio talks	1									
TV talks	14									
Popular articles	6									
Extension Literature	11	50	5	55	2	1	3	3		3
Advisory Services	362	580	47	627	4	3	7	24		24
Scientific visit to farmers field	7	31	5	36	1		1	6		6
Farmers visit to KVK	198	653	53	706	7	2	9			
Diagnostic visits	96	109	7	116	6	1	7	6		6
Exposure visits	4	92	23	115	3	2	5	3		3
Celebration of important days	3	36	86	122	6	4	10			
(specify)										
International Womens Day, World										
Food Day, Environment Day										
Any Other (Specify)HRD	6									
Programmes										
Total	743	22564	7467	30031	106	56	162	1033	299	1332

#### PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

#### 9.A. Production of seeds by the KVKs

#### **Breeder seed**

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (Kg)	Value (Rs.)	Number of farmers to whom provided
Vegetables	French Bean	Arka Komal	-	450.50	67500.00	Handed over to IIHR
	Radish	A.Nishant		70.00	17500.00	Handed over to IIHR
	Tomato	Arka sourabh	-	4.8	26820.00	Handed over to IIHR
	Brinjal	Arka Shrish	-	42.80	27820.00	Handed over to IIHR
	Okra	Arka Anamika	-	218.00	151200.00	Handed over to IIHR
	Onion	A.Bindu		30.00	36000.00	Handed over to IIHR
	Ridge Gourd	Arka sumeet	-	89.18	31213.00	Handed over to IIHR
	Dolichos	Arka jay		150	22500.00	
Others (specify)	Mucuna	-	-	600	48000.00	
Total				1726.12	428553.00	

#### Certified/T.L seeds, Produced under NHM Scheme:

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (Kg)	Value (Rs.)	Number of farmers to whom provided
Vegetables	French Bean	Arka suvidha	-	450.50	40500	Being sold at KVK
	Radish	A.Nishant		80	20000	Being sold at KVK
	chilli	Arka lohit	-	13	13000	Being sold at KVK
Total				1726.12	73500	
	502053.00					

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

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits						

Ornamental plants					
Medicinal and Aromatic					
	Areca nut Seedlings	Hirehalli			
Plantation		Tall	54451	544510	60
	Coconut	Arsikere			
		Tall	150	3750	
Total			54601	548260	60

9.C. Production of Bio-Products-Nil

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.)

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports	Action Plan Report 2010-11 Annual Review Meet 2009-10 SAC Meeting Report 2009-10 Monthly DARE Report Monthly Cabinet Report Monthly Report	KVK Staff, Hirehalli	6
News letters			
Technical bulletins			
Popular articles	Nutritional Garden	Radha R.Banakar, M.Shivashenkarmurthy	
Extension literature	Bettada Nelli	M.Shivashenkarmurthy,J.M.prashanth, P.R.Ramesh and K.N.Jagadish	1000
	Bettada Nelliyalli Moulyavardhita Padarthagalu	Radha R.Banakar, J.M.Prashanth, M.Shivashenkarmurhty, B.Hanumnathegowda	1000
	Bettada Nelli	J.M.Prashanth, Dr. Somashekar, M.Shivashenkarmurhty,K.S.SannaManjunath	1000
	Prachandolona	M.Shivashenkarmurhty, K.S.SannaManjunath	1500
	General benefits of Amla		
Others (Pl. specify) News Paper Coverage	Togaribele bijotpadane :Salahe - 22/7/2010 Krushi kendradalli Aahara dinacharane- 23/10/2010 Hirehalliyalli Bale Kshetrotasava- 28/11/2011 Krushi Tantrajnann Mahiti Vargavne Kendra-15/2/2011	KVK Staff, Hirehalli	4
TOTAL			4510

10.B. Details of Electronic Media Produced-Nil

- 10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period). Nil
- 10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year -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)

<b>S.</b>	Crop / Enterprise	ITK Practiced	Purpose of ITK
No.			
1.	Arecanut	Application of Tank Silt @	Supply of nutrients , better
		50tons/ha	drainage and aeration
2.	Pulses	Coating of Caster Oil to the	Physical barriers for pest
		pulses and stored in the earthen	
		pots	
3.	Mango	Ragi and Paddy husk as a	To check evaporation and weed
		mulching material	growth
4.	Coconut	Root feeding with neem oil	Reduction of stem bleading

#### 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

#### 2. Rural Youth

- Survey and discussion
- ➢ Feedback from rural youths

#### 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 : 8
- ii. No. of farm families selected : 85
- iii. No. of survey/PRA conducted : 6

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

1.	Status of establishment of Lab	: Yet to be establish
	Year of establishment List of equipments purchased with amount	:

#### Details of samples analyzed so far since establishment of SWTL:Nil

#### Details of samples analyzed during the 2010-11 :- Nil

#### **10.I.** Technology Week celebration :Nil

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

A. Introduction of alternate crops/varieties :Nil

- B. Major area coverage under alternate crops/varieties:Nil
- C. Farmers-scientists interaction on livestock management:Nil
- D. Animal health camps organized :Nil
- E. Seed distribution in drought hit states:Nil
- F. Large scale adoption of resource conservation technologies
- G. Awareness campaign ;Nil

#### PART XI. IMPACT

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

#### 11.B. Cases of large scale adoption – Nil-

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

- As a result of on-campus trainings on composting cultures to the farmers, are adopting for compost cultures (25 %) in vermicomposting and use of bio fertilizers in composting
- Farmers have realized the importance of ICM technology (Vegetables) and only 45% of the IPM components are being voluntarily used by the farmers.
- Farmers have realized the importance of soil testing by various training programmes & as a result 32 farmers have analyzed their soil.
- As a result of FLD & training programmes farmers are following sequential cowpea-ragi cropping system. The farmers are accepted the technology.
- SHG group at Tumkur taluk underwent the training & started preparation of value added candles, phenyl, soap and detergent & market linkage is established.

### 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
BAIF NGO, Tiptur	Trainings and Technical information
ORDER NGO, Tumkur	Trainings, FLD's and Technical information
AWARE NGO, Tumkur	Trainings
UAS, Bangalore	Trainings and FLD's
UAS, Dharwad	Trainings and FLD's
UHS, Bagalkot e	Trainings and FLD's
Veterinary University, Bidar	Trainings and FLD's

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

# 12.B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Karnataka State Amla Campaign	July 2010	KAMPA	8,00,000
Network Project on Climate Change on Impact, Adaptation and Vulnerability of Indian Agriculture to Climate Change	January 2011	CRIDA, Hyderabad	30,00,000
Mass Multiplication of Selected Medicinal Plants	March 2011	NMMP, New Delhi	4,00,000

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

a) Is ATMA implemented in your district Yes/ No

Yes If yes, role of KVK in preparation of SREP of the district? Collecting technical information and training programmes

#### Coordination activities between KVK and ATMA during 2010-11-Nil

#### 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.	Certified Vegetable Seed Production	Project approved under NHM Scheme	200000	200000	-
2.	Integrated Mushroom Unit	Project approved under NHM Scheme	1500000	-	-

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

- 12.F. Details of linkage with RKVY -Nil
- 12. G Kisan Mobile Advisory Services Nil

#### PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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

Name	Date of sowing	Date of	-	Details of produ	iction		Amount (R	s.)	Remarks	
of the crop		harvest	Area (ha)	Variety	Type of Produce	Qty.	Cost of inputs	Gross income		
Spices & Plantation crops						<u>.</u>			·	
Arecanut	Feb, 2010	-		Hirehalli tall	Seedlings	54451	108902.0	544510	-	
Coconut	Nov, 2010			Arsikere tall	Seedlings	150	500	3750		
Vegetables French Bean	1.10.2010	15.1.2011	0.8	Arka Komal	Seeds	450.50 kg		67500	Handed over to IIHR	
Radish	26.10.2010	28.2.2011	0.2	Arka Nishant	Seeds	70 kg		17500	Handed over to IIHR	
Tomato	26.9.2010	25.1.2011	0.1	Arka Sourabh	Seeds	4.8 kg		26820	Handed over to IIHR	
Brinjal	15.4.2010	15.9.2010	0.4	Arka Shrish	Seeds	42.80 kg		27820	Handed over to IIHR	
Okra	15.6.2010	8.10.2010	1	Arka Anamika	Seeds	218 kg		151200	Handed over to IIHR	
Onion	25.6.2010	15.3.2011	0.1	Arka .Bindu	Seeds	30 kg		36000	Handed over to IIHR	
Ridge Gourd	4.4.2010	15.7.2010	1	Arka Sumeet	Seeds	89.18 kg		31213	Handed over to IIHR	
Dolichos	27.10.2010	2.3.2011	1	Arka Jay	Seeds	150 kg		22500	Handed over to IIHR	
French Bean	2.11.2010	26.2.2011	1	Arka Suvidha	Seeds	450.50		40500	Being sold at KVK	
Radish	2.11.2010	26.2.2011	0.8	Arka .Nishant	Seeds	80		20000	Being sold at KVK	
Chilli	4.6.2010	12.12.2010	0.2	Arka lohit	Seeds	13		13000	Being sold at KVK	
Others (specify)	0.4.0010	4.4.004.4				600.1		10000	1	
Mucuna	8.6.2010	4.1.2011	1	S	leeds	600 kg		48000		

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

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

#### 13.E. Utilization of hostel facilities:Nil

#### 13.F. Database management

S. No	Database target	Database created
1	Farmers Database	Under process
2	Technology Inventory for the District	Under process
3	Database for Technologies assessed and Refined	Under process
4	Frontline Demonstrations Database	Under process
5	Training Database	Under process
6	Database of Extension Programmes	Under process
7	Seeds and Planting Material Database	Under process
8	KVK Inventory of Assets	Under process

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							
With KVK							

#### 14.B. Utilization of funds under FLD on Cotton (Rs. in Lakh)

Nil

S.	Items / Head	Opening	Remittance by	Actual	Closing	Remarks
No		balance if	ZPD VIII	expenditure	balance if	
		any	Bangalore	dubitable to	any	
			_	Council A/C		
1	Production Technology -	- 50 ha				
	a. Essential inputs					
	b. POL, hiring					
	vehicle, Kisan					
	melas, printed					
	materials,					
	reports,					
	demonstration					
	boards					
	Total					
2.	Farm Implements – 75 h	a				
	a. New					
	equipments					
	b. Contingencies					
	Total					

### 14.C. Utilization of KVK funds during the year 2010-11 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
	curring Contingencies			
1	Pay & Allowances	4500000	4500000	4392872
2	Traveling allowances	125000	125000	64106
3	Contingencies	120000	120000	01100
A	Stationery, telephone, postage and other expenditure on			
	office running, publication of Newsletter and library			
	maintenance (Purchase of News Paper & Magazines)	220000	220000	220000
В	POL, repair of vehicles, tractor and equipments	200000	200000	200000
 C	Meals/refreshment for trainees (ceiling upto			
	Rs.40/day/trainee be maintained)	120000	120000	120000
D	Training material (posters, charts, demonstration material			
	including chemicals etc. required for conducting the			
	training)	30000	30000	30000
Ε	Frontline demonstration except oilseeds and pulses			
	(minimum of 30 demonstration in a year)	150000	150000	150000
F	On farm testing (on need based, location specific and			
	newly generated information in the major production			
	systems of the area)	70000	70000	70000
G	Training of extension functionaries	25000	25000	25000
Н	Maintenance of buildings	90000	90000	90000
Ι	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library	5000	5000	5000
K	Extension Activities	30000	30000	30000
L	Farmers Filed School	25000	25000	25000
	TOTAL (A)	5590000	5590000	5421978
B. Noi	n-Recurring Contingencies			
1	Works			
a.	Admn. Building(1 <sup>st</sup> installment)	2000000	2000000	2000000
b.	Farmers Hostel(1 <sup>st</sup> installment)	1700000	1700000	1700000
2	Equipments including SWTL & Furniture			
a.	Generator	100000	100000	99851
b.	LCD Projector with accessories	100000	100000	100000
с.	Tractor with implements	500000	500000	500000
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)	10000	10000	10000
TOTA		4410000	4410000	4409851
C. RE	VOLVING FUND	0	0	186708
GRAN	ND TOTAL (A+B+C)	1000000	1000000	10018537

# 14.D. Status of revolving fund (Rs. in lakh) for the three years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2008 to March 2009				
April 2009 to March 2010	100000	105000	33336	171634
April 2010 to March 2011	171634	382870	186708	367796

#### 15. Details of HRD activities attended by KVK staff during 2010-11

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Radha R Banakar	SMS ( Home Science )	Spawn (Mushroom Seed) Production	IIHR, Bangalore	17th – 19th June 2010
Radha R Banakar	SMS ( Home Science )	Mushroom cultivation	IIHR, Bangalore	21st June 25th 2010
K.N. Jagadish	SMS ( Agri Extn)	Mass media	MANAGE, Hyderabad	5-9 <sup>th</sup> July, 2010
Somashekar	SMS ( Plant Breeding )	Oil Seed and Pulses at	UAS, Dharward	26-30 <sup>th</sup> , 2010
Radha R Banakar	SMS ( Home Science )	Post technology in horticulture crops	IIHR, Bangalore	17-24 <sup>th</sup> , Aug,2010
Prashanth JM	SMS ( Hort )	Climate change and water productivity	CRIDA, Hyderabad	16-29 <sup>th</sup> Sept, 2010
Ramesh P.R	SMS (Soil Science)	Climate change and water productivity	CRIDA, Hyderabad	16-29 <sup>th</sup> Sept, 2010
Shivashenkarmurthy	Prg. Asst ( Agronomy )	Climate change and water productivity	CRIDA, Hyderabad	16-29 <sup>th</sup> Sept, 2010
Somashekar	SMS ( Plant Breeding )	Advances in Quality Seed Production, Processing and Marketing	UAS, Bangalore	13th to 4th Sept. ,2010
Prashanth JM	SMS ( Hort )	Fish culture in IFS	UAS, Bangalore	11-13 <sup>th</sup> ,Jan, 2011
Shivashenkarmurthy	Prg. Asst ( Agronomy )	Fish culture in IFS	UAS, Bangalore	11-13 <sup>th</sup> ,Jan, 2011
Radha R Banakar	SMS ( Home Science )	Interface meeting for SMS Home science	UAS, Bangalore	8-9th , Feb, 2011

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

# SUMMARY FOR 2010-11 I. TECHNOLOGY ASSESSMENT

#### Summary of technologies assessed under various crops

Thematic areas	Сгор	Name of the technology assessed	No. of trials		
	Areca nut	Management of Nut Splitting in Arecanut	5		
Integrated Nutrient Management	Tomato	Assessment of microbial consortium for Tomato production	5		
Varietal Evaluation	China Aster	Assessment of china aster varieties	5		
	Groundnut	Assessment of Groundnut varieties	5		
	Tomato	Performance and assessment of tomato varieties	5		
Attegrated Pest Management Coconut Integrated Management of eriophid mite in Coconut					
Integrated Crop Management	Banana	Assessment of paired row and pit method of planting in Banana	3		
	Redgram	Enhancing the productivity in Redgram production system through transplanting	6		
	Mango	Assessment of Mucuna (Medicinal plant) as intercrop in Mango.	4		
Integrated Disease Management	Groundnut	Management of Collar Rot disease in Groundnut	3		
Total	I		43		

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-Nil

# III. FRONTLINE DEMONSTRATION Cotton

Frontline demonstration on cotton:Nil

#### **Other crops**

Crop	Thematic area	Name of the technology	No. of	No. of	Area	Yield	(q/ha)	% change in yield	Other param	neters	*Econo	mics of demons	stration (Rs./ha	)		*Economics (Rs./I		
Стор	Thematic area	demonstrated	KVKs	Farmer	(ha)	Demons ration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals	ICM	Aerobic Paddy cultivation		4	1	45.2	42.5	6.35			16500	45200	28,700	1.74	20500	42500	22000	1.10
	ICM	Management of Saline Soils		10	2	38.3	33.1	15.7			26504	49470	22966	1.87	23976	39750	15774	1.66
	ICM	ICM in Maize		12	5	56.2	52.6	6.84			13800	50580	36780	3.66	13200	47340	34140	3.58
Millets	Cropping System	Sequential cropping of Cowpea followed by Ragi		12	5	Cow pea 6.2 & Ragi 20.3	15.8	20.1			16,800	48,398	31,598	1.88	6080	15,800	9,720	1.60
Vegetables	ICM	ICM in Brinjal		10	1	259.6	221	17.46			32750	181720	148970	5.54	29750	132600	102850	4.40
	ICM	ICM in Tomato		10	2	18.2	15.8	18.18			33000	127400	94400	3.9	29800	102700	72900	3.44
	ICM	ICM in Frenchbean		10	2	161.8	121.4	20.38			21342	80900	59558	3.79	17245	60700	43455	3.51
	Popularization of variety	Popularization of Arka Jay		10	2	516.1	345.7	49.29			38421	154830	96589	4.02	34214	103710	69496	3.03
	IPM	IPM in Cabbage		10	2	130.1	84.7	53.6			18345	65050	46705	3.5	17504	42350	24846	2.41
Fruit	ICM	ICM in Mango		10	2						In progress							
	INM	INM in Banana		10	2	37 t/ha	31.5t/ha	17.46			85000	681600	596600		78000	211500	133500	2
	IDM	IDM in Pomogranate		10	2	8.52	2.35				93500	135864	42364	1.45	88000	113886	25886	1.29
Fodder	Fodder production	Introduction of CO- 3 variety		7	0.5						In progress							
Plantation	IDM	IDM in Arecanut		10	100 palms	10.89	7.89					In progress	3					
	PHT	Safe storage of pulses		5	5 units							Ongoing						
	Т	otal																

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

#### Livestock :Nil

#### Fisheries :Nil

**Other enterprises :Nil** 

#### Women empowerment:Nil

#### Farm implements and machinery

Name of the		Name of the	No. of	No. of	Area	Field observation (output/man hour)% change in major parameterI		Labo	or reduction	on (man d	ays)	Cost reduction (Rs./ha or Rs./Unit ect.)				
implement	Стор	technology demonstrated	KVKs	Farmer	(ha)	Demons ration	Check									
Groundnut Decorticator	Groun nut	Ground nut decorticator		3		1	9	88								

#### **Other enterprises**

#### **Demonstration details on crop hybrids**

Сгор	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha	ı) / major par	rameter						
				<b>Demonst-ration</b>	Local check	% change	Gross Cost	Gross Return	Net Return	BCR		
Cereals												
Maize	NAH 1137	12	5	56.2	52.6	6.84	13800	50580	36780	3.66		
Vegetable crops												
Tomato	Arka Ananaya	10	2	516.1	345.7	49.29	38421	154830	96589	4.02		
Cabbage	Unatti	10	2	18.2	15.8	18.18	33000	127400	94400	3.9		
Brinjal	Arka Anand	10	1	259.6	221	17.46	32750	181720	148970	5.54		

# **IV. Training Programme**

#### Farmers' Training including sponsored training programmes (On campus)

	No. of	No. of No. of Participants								
Area of training	Courses	General				SC/ST		Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
a) Vegetable Crops										
Production of low value and high volume crop	1	21	5	26	2	-	2	23	5	28
Others (pl.specify)-Seed Production in Vegetables	1	26	-	26	3	-	3	29	-	29
Cultivation of Fruit	1	13	-	13	2	-	2	15	-	15
Nursery Management	1	8	2	10	-	-	-	8	2	10

Integrated nutrient management	2	48	-	48	4	-	4	52	-	52
Production and use of organic inputs										
Management of Problematic soils	1	16	6	22	4	2	6	20	8	28
Integrated Disease Management	1	28	-	28	3	-	3	31	-	31
TOTAL	9	160	35	195	18	5	23	178	40	218

#### Farmers' Training including sponsored training programmes (Off campus)

	No. of					No. of Participar	ıts			
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Cropping Systems	1	20	3	23	5	2	7	25	5	30
Seed production	2	91	15	106	2	-	2	93	15	108
Nursery management										
Integrated Crop Management	2	47	6	53	3	-	3	50	6	56
Others (pl.specify)- Organic Farming in Oil Seed Crops	1	24	4	28	5	2	7	29	6	35
Production of low value and high volume crop	1	24	6	30	-		-	24	6	30
Off-season vegetables	2	65	43	108	-	2	2	65	45	110
Others (pl.specify)- ICM in Cole Crops	1	24	2	26	3	-	3	27	2	29
Cultivation of Fruit	1	37	5	42	-	-	-	37	5	42
Management of young plants/orchards	1	18	3	21	2	1	3	20	4	24
Nursery Management	1	9	3	12	-	-	-	9	3	12
Management of potted plants										
Export potential of ornamental plants	1	28	2	30	-	-	-	28	2	30
Integrated nutrient management	1	30	2	32	-	-	-	30	2	32
Soil and water testing	1	15	5	20	-	-	-	15	5	20
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	-	22	22	-	8	8	-	30	30

Storage loss minimization techniques	1	19	6	25	1	2	3	20	8	28
Value addition										
Women empowerment	1	-	28	28	-	2	2	-	30	30
Women and child care	1	-	25	25	-	1	1	-	26	26
Post Harvest Technology	2	38	8	46	4	2	6	42	10	52
Plant Protection										
Integrated Pest Management	2	53	4	57	-	-	-	53	4	57
Integrated Disease Management	3	81	18	99	9	1	10	90	19	109
TOTAL	27	623	210	833	34	23	57	657	233	890

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

	No. of				No. o	f Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production	2	26	11	37	3	1	4	29	12	41
TOTAL	2	26	11	37	3	1	4	29	12	41

#### Training for Rural Youths including sponsored training programmes (off campus)

	No. of				No. o	f Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Post Harvest Technology	1	3	11	14	1	1	2	4	12	16
Any other (pl.specify) Health and hygiene education to rural youth	1		55	55		6	6		61	61
TOTAL	2	3	66	69	1	7	8	4	73	77

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

	No. of				No. 0	of Participants					
Area of training	Courses	General SC/ST							Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Productivity enhancement in field crops											
Integrated Pest Management	2	43	7	50	6		6	49	7	56	

Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology	1	20	3	23	2	1	3	22	4	26
Low cost and nutrient efficient diet designing	1		28	28		2	2		30	30
Total	4	63	38	101	8	3	11	71	41	112

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

	No. of				No. o	f Participants					
Area of training	Courses		General		SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Livestock feed and fodder production	1	20	3	23	2	1	3	22	4	26	
Household food security											
Any other (pl.specify)	1	19	1	20	6	2	8	25	3	28	
Total	2	39	4	43	8	3	11	47	7	54	

#### Sponsored training programmes -Nil

#### Details of vocational training programmes carried out for rural youth

		N. 6				No.	of Participants				
S.No.	Area of training	No. of		General			SC/ST		(	Grand Total	
		Courses	Male	Female	Total	Male	Female	Total	Male	Female	Tota l
1	Crop production and management										
2	Post harvest technology and value addition										
2.a.	Value addition	1	-	30	30	-	-	-	-	30	30
5.b.	Others (pl.specify)										
	Grand Total	1		30	30					30	30

# V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	362	634	24	658
Diagnostic visits	96	123	6	129
Field Day	02	194	10	204
Group discussions				
Kisan Ghosthi				

Film Show				
Self -help groups				
Kisan Mela				
Exhibition	10	27060	1179	28239
Scientists' visit to farmers field	07	37	06	43
Plant/animal health camps				
Farm Science Club				
Ex-trainees Sammelan				
Farmers' seminar/workshop	02	120	25	145
Method Demonstrations				
Celebration of important days				
Special day celebration	03	132	-	132
Exposure visits	04	120	03	123
Others (pl.specify)				
Farmers visit to KVK	198	715	-	715
Lectures delivered as resource person	16	1000	76	1076
Extension Literature	11	58	03	61
Total	711	30193	1332	31525

#### **Details of other extension programmes**

Particulars	Number
Electronic Media	-
Extension Literature	04
News Letter	_
News paper coverage	04
Technical Articles	05
Technical Bulletins	_
Technical Reports	06
Radio Talks	01
TV Talks	14
Animal health amps (Number of animals treated)	_
Others (pl.specify)	-
Total	34

# 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 (q)	Value (Rs)	Number of farmers
Vegetables					
	French Bean	Arka Komal	450.50	67500.00	Handed over to IIHR
	Radish	A.Nishant	70.00	17500.00	Handed over to IIHR
	Tomato	Arka sourabh	4.8	26820.00	Handed over to IIHR
	Brinjal	Arka Shrish	42.80	27820.00	Handed over to IIHR
	Okra	Arka Anamika	218.00	151200.00	Handed over to IIHR
	Onion	A.Bindu	30.00	36000.00	Handed over to IIHR
	Ridge Gourd	Arka sumeet	89.18	31213.00	Handed over to IIHR
	Dolichos	Arka jay	150	22500.00	Handed over to IIHR
	French Bean	Arka suvidha	450.50	40500	Being sold at KVK
	Radish	A.Nishant	80	20000	Being sold at KVK
	chilli	Arka lohit	13	13000	Being sold at KVK
Others (specify)	Mucuna	-	600	48000.00	Handed over to IIHR
Total					

### **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
Medicinal and Aromatic					
	Areca nut Seedlings	Hirehalli Tall	54451	544510	60
	Coconut	ArsikereTall	150	3750	-
Total			54601	548260	60

Production of Bio-Products:Nil

### VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2010-11:Nil

# **VIII. SCIENTIFIC ADVISORY COMMITTEE**

Number of SACs conducted

01

### IX. NEWSLETTER

Number of issues of newsletter published

## X. RESEARCH PAPER PUBLISHED

Number of research paper published

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

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

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