

ANNUAL REPORT 2011-12

(FOR THE PERIOD APRIL 2011 TO MARCH 2012)

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	ihrkvk@gmail.com	www.ihr.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 Post, Bangalore-560089	080- 28466420	080- 28466291	director@ihr.ernet.in , ihrdirector@gmail.com	www.ihr.ernet.in

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@ihr.ernet.in

1.4. Year of sanction: 28th, March 2009

1.5. Staff Position (as 31st March 2012)

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 & PC	M	Agronomy	Ph.D. Agronomy					
2.	SMS	Sri K.N. Jagadish	SMS (Agril Extn.)	M	Agril.Exten.	M.Sc. Agriculture	15600 - 39100+5400	22280	17.11.2009	Permanent	OBC
3.	SMS	Sri P.R.Ramesh	SMS (Soil Science)	M	Soil Science	M.Sc. Agriculture	15600 - 39100+5400	22280	17.11.2009	Permanent	OBC
4.	SMS	Sri Prashanth J.M	SMS (Horticulture)	M	Horticulture	M.Sc. Agri Horticulture	15600 - 39100+5400	22280	24.11.2009	Permanent	Others
5.	SMS	Sri B. Hanumanthe Gowda	SMS(Plant Protection)	M	Plant Protection	M.Sc. Agriculture	15600 - 39100+5400	22280	02.12.2009	Permanent	Others
6.	SMS	Ms. Radha R.Banakar	SMS (Home Science)	F	Home Science	M.Sc. Home Science	15600 - 39100+5400	22280	05.12.2009	Permanent	Others
7.	SMS	Dr. Somashekhar	SMS (Plant Breeding)	M	Plant Breeding	Ph.D. Agriculture	15600 - 39000+5400	22280	07.12.2009	Permanent	Others
8.	Programme Assistant (Lab Tech.)/T-4	Vacant					9300 - 34800+4200				
9.	Programme Assistant (Computer)/ T-4	Ms. Jyoti Appu Naik	Programme Assistant (Computer)/ T-4	F	Information Science	B.E.	9300 - 34800+4200	14330	01.10.2009	Permanent	PH
10.	Prog .Assistant/ Farm Manager/T-4	Sri K.S.Sanna Manjunath	Farm Manager	M	Agronomy	M.Sc. Agriculture	9300 - 34800+4200	14330	08.10.2009	Permanent	OBC
11.	Assistant	Sri D. Krishnappa	Assistant	M	Accounts		9300 - 34800+4200	15930	14.10.2009	Permanent	Others
12.	Jr.Stenographer	Smt.Veda Kurnalli	Jr.Stenographer	F	Stenographer		5200 - 20200+2400	10210	17.02.2010	Permanent	Others
13.	Driver	Sri M.H.Ningappa	Driver	M	Driver		5200 - 20200+2000	8990	30.12.2009	Permanent	Others
14.	Driver	Sri Hemanth Kumar	Driver	M	Driver		5200 - 20200+2000	8720	04.01.2010	Permanent	OBC
15.	Supporting staff	Sri P.Narayanappa	Supporting Staff	M	Supporting Staff		5200 - 20200+1800	9090	24.07.2009	Permanent	SC
16.	Supporting staff	Sri G.Manjanna	Supporting Staff	M	Supporting Staff		5200 - 20200+1800	7000	1.11.2011	Permanent	

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

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	-

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	-	-	-	-	-	under construction
2.	Farmers Hostel	ICAR	-	-	-	-	-	under Construction
3.	Staff Quarters							
	1							
	2							
	3							
	4							
	5							
	6							
4.	Demonstration Units							
	1.Compost unit	KAMPA	Sept. 2011	120	30000	-	-	Constructed
	2.Spawn production unit	NHM	March 2012	150.0	6 lakhs			Constructed
	3.Vermicompost	KAMPA	-	-	25000	March 2012	64	under construction
5	Fencing							
6	Rain Water Harvesting System	IIHR	March 2011		10.00 Lakhs			Constructed
7	Threshing floor	IIHR	March 2011		-			Constructed
8	Farm godown	IIHR	March 2011		-			Constructed

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Diesel Jeep	2009	596783	66050	Good condition
Motor Cycle	2010	52658	16444	
Honda – Aviator	2010	46025	5759	
Power Tiller	2010	1 42400	742 hrs	
Tractor	2011	560000	485 hrs	

C) Equipments & AV Aids

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

1.8. Details SAC meeting conducted in 2011-12

Sl.No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	1.7.2011	25	08	The Demonstration Units for & Production of Bio-agents can be taken up. Nursery for Vegetable Seedling at KVK,Hirehalli	Demonstration Units are under Construction and a Nursery Unit is completed
2.				There should be regular monitoring of the Frontline Demonstrations and ON-Farm Testing & also these Technologies should be promoted through Field Days & Extension Activities at neighboring Villages of the Farmers.	OFT and FLD are regularly monitored by the respective SMS and same is being popularized by conducting Field Day in the Farmers Field and Mass Media
3.				Assessment & Refinement should be taken on Technologies of IIHR ,Agriculture , Horticulture & Veterinary Universities. Impact Assessment on Training should be carried out & documented.	We have selected a few IIHR Technologies & implemented in the Farmers Field & also proposed a few IIHR Technologies for OFT and FLD.
4.				There is a need to Integrate the KVK Activities with the Programmes of the Line Department. In this regard, there is need to build linkages with the Deputy Commissioner, Tumkur District and also Department of Agriculture, Government of Karnataka.	Converge of Line departments & Collaborative sponsored Activities are conducted regularly Seed Village concept & Capacity Building Training Programmes were conducted
5.				Establishment of Soil Testing Laboratory & also Hi-tech Nursery are taken up on priority.	Awaiting for 12 th Plan Funds
6.				There is good scope for Women Empowerment Programmes to be taken up by the Subject-Mater Specialists (Home Science) in collaboration with Women & Child Development Department.	Good rapport with Women & Child Development Department, NGOs and Conducted Awareness Programmes on health aspects. World Food Day was celebrated during the period in collaboration with Women and Child Development Dept and NGO
7.				Mechanization in Agriculture & Horticulture Arecanut based Cropping System Model to be established in KVK farm Quality seeds & supply to Farmers – Arecanut &	We have procured all Agri & Horti implements & displayed at KVK premises for the benefit of Farmers Arecanut based model system was established in area of 0.1 hectare at KVK farm

				Coconut.	Quality Seeds and Seedling are being produced and sold to farmers at nominal cost.
8.				<p>Production of Minor Millets Value Addition through Method</p> <p>Demonstration/Training can be taken up and also other Agriculture Crops.</p> <p>ICT – SMS to Farmers (Crop based information) & implement ICT Programmes on large scale in the District.</p> <p>Tamarind Seed processing Vermicompost unit at KVK, Campus</p>	<p>FLD on Ragi based sequential Cropping were conducted and Value addition - Ragi Malt trials were conducted at KVK Hirehalli Tumkur</p> <p>ICT – Regular SMS to Farmers on Crop based Information is being done at KVK Hirehalli</p> <p>Income Generating Activities on Tamarind Seed processing is being identified</p>
9.				<p>More emphasis should given on Dry Land Horticulture Precision Farming Package should be popularized through Training and Exposure Visit.</p> <p>Mulching Sheet Technology in Vegetables should be taken up.</p> <p>Technology for Youth – Income Generating Activities</p>	<p>Training on Dryland horticulture was conducted to farmers and implemented demonstration unit in D.Nagenahalli.</p> <p>Exposure visit to IIHR to 68 farmers were taken in different occasion</p> <p>Income Generating Activities on Tamarind Seed processing is being identified at Koratagere, Thovinakere</p>
10.				High Density Planting in Fruits made Awareness through Training/Exposure visit.	Exposure Visit were conducted to IIHR on High Density Planting in Mango to Tumkur District Farmers.
11.				<p>Apiculture should be implemented in the Farm for Quality Seed Production.</p> <p>Encourage Bio- digester in Farmers Field</p> <p>More emphasis should be given on IFS</p>	<p>Placement of Purchase Order has already done for Bee hieve</p> <p>A few farmers at Sira taluk implemented with the help of State Horticulture Dept. and KVK Hirehalli</p> <p>Model IFS demonstration in D.Nagenahalli Village</p>
12.				<p>Groundnut – ARS – Pavagada Collaboration and needs to linked for Leaf minor.</p> <p>Groups Identification for Seed Production example : ML- 365 (Ragi),Redgram BRG -1 etc., with seed village concept</p>	<p>Training for Extension Functionaries was Conducted and follow up in the Field Level is done in Collaboration with ARS.</p> <p>Red gram has been already harvested at Thovinakere in Vijayakumar field.</p>

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.	Central Dry Zone (Zone IV) Taluku: Koratgere, Madhugiri, Sira, Pavagada	<ul style="list-style-type: none"> • This zone covers an area of 4.74 Lakhs hectare • The Annual rainfall ranges from 454 and 718 mm, of which more than 55% received in Kharif season. • The elevation ranges from 639 and 1197m • Soils are red sandy loams in major areas, shallow to deep black in remaining areas. • The major crops grown are Ragi, Paddy, Redgram, Groundnut, Sunflower, Coconut, Arecanut, Mango, Banana, Tomato, Brinjal, Beans, Peas, Aster, Dairy
2.	Eastern Dry Zone (Zone V) Taluk: Tumkur	<ul style="list-style-type: none"> • This zone covers an area of 1.04 Lakh hectares. • The Annual rainfall ranges from 679 and 889 mm, of which more than 50% received in Kharif season. • The elevation is 818 m from sea level. • Soils are red loamy in major areas, shallow to deep black in remaining areas. • The major crops grown are Groundnut, Maize, Paddy, Ragi, Redgram, Tomato, Brinjal, Mango, Sapota, Arecanut, Coconut, Aster, Dairy

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 style="list-style-type: none"> • Colour given by haematites or Yellow limonites • Poor in soil fertility • Low base exchange capacity • Deficient in organic matter • Low water holding capacity • The pH ranges from 5.5.-6.5 • Low cohesion, plasticity & swelling 	6, 15,230
2.	Red Loam	<ul style="list-style-type: none"> • Colour given by oxides of iron • Poor in soil fertility • Low- medium base exchange capacity • Deficient in organic matter • Low water holding capacity • The pH ranges from slightly acidic or neutral • Low cohesion , plasticity & swelling 	2, 04,093

3.	Shallow Black Soil	<ul style="list-style-type: none"> • Colour varying from dark brown to dark yellowish brown • Soil with more than 35 per cent clay and crack when dry. • High soil fertility • High base exchange capacity • High organic matter content • High water holding capacity • The pH ranges from 7.5 - 8.5 • High cohesion, plasticity & swelling 	2, 45,432
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2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Paddy	33508	1389241	41.46
2	Ragi	192009	3828659	19.94
3	Jowar	756	5503	7.28
	Maize	25026	630154	25.18
4	Redgram	10192	83258	6.15
5	Ground nut	93028	801421	5.60
6	Sunflower	12092	55865	4.62
7	Cotton	738	4087 bales	336 kg lint
8	Banana	3907	129712 ton	33.2 ton
9	Tomato	673	51821 ton	77 ton
10	Brinjal	356	13884 ton	39 ton
11	Tamarind	2278	21868 ton	9.6 ton
12	Chilli	3199	37428 ton	11.7 ton
13	Coconut	122469	13174.4 ton	46Nuts/palm/yr
14	Arecanut	19044	26040 ton	10.62q/ha/yr

*Source: Dept of Agriculture, Tumkur & Tumkur at a Glance 2010-11

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
January 11	0	29.0	19.1	75.0
February 11	2.8	28.9	18.9	74.3
March 11	1.2	28.0	18.6	74.0
April 11	65.1	25.0	18.0	76.1
May 11	84.4	27.0	18.6	70.0
June 11	42.8	30.0	20.0	66.0
July 11	59.3	32.9	22.5	63.0
August 11	88.9	34.4	24.8	60.5
September 11	39.5	32.0	21.0	70.2
October 11	122.7	29.8	20.1	79.1
November 11	36.1	28.9	19.6	79.8
December 11	1.3	29.3	19.3	79.0
Total	544	355.2	240.52	867

* Source: Dept of Agriculture, Tumkur & Tumkur at a Glance 2010-11

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

Category	Population	Production(Milk) 000 tons	Productivity(lt/animals)
Cattle			
<i>Crossbred</i>	63704	54	5.5745
<i>Indigenous</i>	440888	56	2.0671
Buffalo	217528	68	2.5382
Sheep Meat 000 tons			
<i>Crossbred</i>	9		--
<i>Indigenous</i>	884643	17.31	--
Goats	322373	16.60	--
Pigs			
<i>Crossbred</i>	905	0.23	--
<i>Indigenous</i>	12411		--
Rabbits	560	NA	--
Poultry Egg production in Lakhs			
Hens	6,42,382	--	--
<i>Desi</i>		273	--
<i>Improved</i>		71	--
Category	Area	Production	Productivity
<i>Inland(Fishes)</i>	1306 ha	16,000 metric ton	650-700 kg/ha

*Source: Dept of Animal husbandry and veterinary

2.7 :District Profile has been updated for the 2011-12 Yes / No: **Yes**

2.8 : OPERATIONAL AREA DETAILS FOR THE YEAR 2011-12

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	Udigere	Haralur, Kesaramadu, Beemasandra, Bairsandra, Gollahalli, Neralpur, Pemmanahalli, Sangapura, Doddathimnapalya, Chikahalli, Beeranakallu, G.H.Palya & Belagumba	Two Year Six Months	Groundnut, Maize, Paddy, Ragi, Redgram, Tomato, Brinjal, Mango, Sapota, Arecanut, Coconut, Aster, Dairy	<ol style="list-style-type: none"> 1. Use of local varieties and low yield. 2. No seed treatment 3. Poor soil and nutrient management 4. Tikka disease, root grub, Red and hairy caterpillar in Groundnut. 5. Zinc (Zn), Iron (Fe) deficiency in Maize and Zn in Paddy 6. Pod borer and sterile mosaic disease in red gram. 7. Shoot and fruit Borer in Brinjal 8. Powdery mildew and hoppers in Mango. 9. Lack of skill in nursery technique & management, 10. Lack of knowledge about importance of soil & water testing, 11. Lack of knowledge in pre and post harvest technology management. 12. Lack of knowledge for income generating activities, malnutrition and unhygienic practices. 13. Dropping and splitting of areca nuts 	<ol style="list-style-type: none"> 1. Popularization of HYV / hybrids 2. Seed production techniques in vegetables and field crops 3. Integrated Nutrient Management and Soil test based fertilizer application 4. Integrated Pest & Disease Management 5. Propagation techniques in fruits and vegetables 6. Income generating activities, 7. Value added products 8. Nutrition education and hygiene 9. Post harvest technology in vegetables and fruits

2.	Koratagere	Kymanhalli, Thovinakere	Chikvalli, Kymanhalli, Bidlot, Kodlahalli, D.Naganahalli, Chatnahalli,	Two Year Six Months	Maize, Paddy, Ragi, Redgram, Tomato, Sunflower, Banana, Groundnut, Mango, Sapota, Arecanut, Coconut, Aster, Dairy, Frenchbean, Brinjal & Marigold.	1. Use of local varieties and low yield. 2. No seed treatment 3. Poor soil and nutrient management 4. Tikka disease, root grub, Red and hairy caterpillar in groundnut. 5. Zn, Fe deficiency in Maize and Zinc in Paddy 6. Pod borer, and sterile mosaic disease in red gram. 7. Flower and Fruit dropping, Powdery mildew and hoppers in Mango . 8, Low yield in Banana 9. Dropping and splitting of areca nuts. 10. Lack of skill in nursery technique & management 11.lack of knowledge about importance of soil & water testing, 12.Lack of knowledge regarding pre and post harvest technology management. 13. Lack of knowledge in income generating activities, malnutrition and unhygienic practices. 14.Druidgery 15. Shoot and fruit Borer, Bacterial blight in Brinjal.	1.Popularization of HYV / hybrids 2.Seed Production Techniques in vegetables and field crops 3. Bud necrosis in sun flower 4. Management of saline soil in Paddy. 5.Integrated Nutrient Management and Soil test based fertilizer application 6.Integrated Pest & disease Management 7.Propagation techniques and post harvest in fruits and vegetables 8.Income generating activities, 9.Value added products 10.Nutrition education and hygiene 11.Druidgery reduction
3.	Madhugiri	Badavanhalli,	Badavanhalli,Siddapur, Siridragallu,Vadderahalli				

4.	Pavagada	Shilapur	Kotgudda, Shilapur, Mugadal Betta, Arkyatanhalli	Two Year Six Months	Groundnut, Sunflower, Ragi, Maize, Paddy, Redgram, Tomato, Brinjal & Dairy,	<ol style="list-style-type: none"> 1. Use of local varieties and low yield. 2. Moisture stress 3. No seed treatment 4. Poor soil and nutrient management 5. Tikka disease, collar rot, root grub in Groundnut. 6. Insufficient water for paddy cultivation 7. Pod borer and sterile mosaic disease in red gram. 8. Shoot and fruit Borer Bacterial blight in Brinjal. 9. Lack of knowledge about importance of soil & water testing, 10. Lack of knowledge in pre and post harvest technology management. 11. Lack of knowledge for income generating activities, malnutrition and unhygienic practices. 12. Drudgery 	<ol style="list-style-type: none"> 1. Popularization of HYV / hybrids 2. Soil and water conservation 3. Seed Production Techniques in field crops 3. Management of Bud necrosis in sun flower 4. Aerobic paddy cultivation 4. Integrated Nutrient Management and Soil test based fertilizer application 5. Integrated Pest & disease Management 6. Income generating activities, 8. Value added Products 9. Nutrition education and hygiene 10. Drudgery reduction.
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5.	Sira	Kataveeranhalli	Kataveeranhalli, Mudimadu, Chikkanahalli, Veerapura and Kamagondanahalli, Bevanahalli, Honnenahalli	Two Year Six Months	Groundnut, Maize, Paddy, Ragi, Cotton, Redgram, Vegetables Mango, Sapota, Arecanut, Coconut, Aster, Dairy & Brinjal	<ol style="list-style-type: none"> 1. Use of local varieties and low yield. 2.No seed treatment 3.Poor soil and nutrient management 4. Tikka disease, root grub, Red and hairy caterpillar in Groundnut. 5. Zn, Fe deficiency in Maize and Zn in Paddy 6. Pod borer, and sterile mosaic disease in red gram. 7. Powdery mildew and hoppers in Mango. 8. Lack of skill in nursery technique & management, 9.Lack of knowledge about importance of soil & water testing, 10. Lack of knowledge regarding pre and post harvest technology management. 11. Lack of knowledge in income generating activities, malnutrition and unhygienic practices. 12.Dropping and splitting of areca nuts 13. Shoot and fruit Borer in Brinjal. 14. Leaf reddening, flower drop, Black arm, Sucking pest and Bollworms problem in cotton 	<ol style="list-style-type: none"> 1. Popularization of HYV / hybrids 2. Seed Production Techniques in vegetables and field crops 3.Integrated Nutrient Management and Soil test based fertilizer application 4.Integrated Pest & Disease Management 5.Propagation techniques and post harvest in fruits and vegetables 6.Income generating activities, 7.Value added Products 8.Nutrition education and hygiene 9. ICM in Cotton
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2.9 Priority thrust areas

Sl. No.	Thrust area
1.	High Yielding varieties / Hybrids
2.	Seed treatment with Bio fertilizers and fungicides
3.	Soil test based fertilizer application
4.	Integrated Nutrient Management
5.	Intercropping / Mixed / Multistoried cropping system
6.	Seed Production Techniques in Vegetables and field crops
7.	Integrated Pest & Disease Management
8.	Post harvest technology in vegetables and fruits
9.	Soil and water conservation
10.	Propagation techniques in fruits and Vegetables
11.	Drudgery reduction
12.	Income generating activities
13.	Child and women care and balanced nutrition
14.	Integrated cropping system

PART III - TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
08	08	35	35	19	19	191	184

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
66	61	1350	2061	670	832	8700	9809

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
12.05	19.58	32500	52175

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
-	-	800	2601

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions											
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products		
													No.	Kg	
1.	Soil and water conservation	Paddy	Salinity	-	Management of saline soils in paddy	3		1	7	1.25			2	8	
	Soil and water conservation		Limited water		Aerobic paddy cultivation	1			3	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	1			6	0.75					
4.	Integrated Pest & disease Management High Yielding varieties / Hybrids and Drudgery Reduction	Groundnut	Drudgery		Groundnut Decorticator	5			4	-			-	-	
			1. Collar rot	Management of collar rot in groundnut			1			5	-			3	253
			1. Smaller seed size	Assessment of GPBD-5 a bold seeded variety			2			6	0.6			-	-
5.	ICM	Redgram	Low yield due to seed drill sowing	Enhancing the productivity in Red gram production system (Transplanting)		2			4	0.09			-	-	
	PHT		Storage Problem		Safe Storage of Pulses	5	1		5	-			-	-	

6.	ICM	Mango	1.Flower & fruit dropping 2.Fruit fly 3.Powdery mildew		ICM in Mango	2			6	-			-	-
	Intercropping system		Mono - cropping in Mango	Assessment of Mucuna as a intercrop in Mango				4	0.8				-	-
7.	ICM	Banana	1.Low plant population 2.Low yield & income	Paired row planting system in banana	-	1		4			5400		-	-
	INM		1.Lower bunch size and yield	-	Micronutrient management in Banana	2		5	-	-			-	-
8.	INM	Arecanut	1.Splitting of nuts and low yield	-	Management of nut splitting in Arecanut -	2		5	-	-			-	-
	IDM		Anabe Roga	-	Integrated Management of Anabe Roga	1	1	8	-	-			1	200
9.	IPM	Coconut	Mite problem	Management of mites				3	-	-			1	1000
10.	IDM	Pomegranate	Bacterial blight	-	Integrated Management of Bacterial blight	3		4	-	-			-	-
11.	High yielding varieties	Tomato	1. Local varieties 2.Low acidity and TSS	Performance and assessment of tomato varieties	-	-		6	1.125 Kg				-	-
	INM	Tomato	1.Low nutrient use efficiency	-	Assessment of microbial consortium for tomato production	3		5	-				1	10
	ICM		1.Local varieties 2. Bacterial blight and leaf curl	-	ICM in tomato	2		12	200 gms				3	512.2

12.	IPM	Brinjal	1. Bacterial wilt 2. Low yield	-	ICM in brinjal	1			4	375 gms			2	252
13.	ICM	French Bean	1. Rust Disease 2. Low Yield	-	ICM in French bean	3			10	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			8	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		-	-		6	0.015			-	-

3 B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1.	Assessment of Groundnut varieties	UAS, Dharwad	Groundnut	5		1	
2.	Management of Collar rot disease in Groundnut	UAS, Bangalore and PDBC, Bangalore		3		1	
3.	Ground nut Decorticator	UAS, Bangalore			3	5	
4.	Enhancing the productivity in Red gram production system	UAS, Dharwad	Red gram	5		1	
5.	Safe Storage of Pulses				5	5	
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	Banana	3		1	
8.	Management of Nut Splitting in Arecanut	UAS, Bangalore, CPCRI, Kasaragod	Arecanut		5	2	
9.	Integrated Management of eriophid mite in Coconut	UAS, GKVK and TNAU, CBE	Coconut	2		1	

10.	Performance and assessment of tomato varieties	IIHR Bangalore, UAS, Bangalore, UAS, Dharwad	Tomato	5		-	
11.	Assessment of microbial consortium for Tomato production	IIHR, Bangalore,			10	3	
12.	ICM in Tomato	IIHR, Bangalore,			10	1	
13.	Performance of Assessment of China Aster Varieties	IIHR, Bangalore MPKV, Rahuri	China Aster	5		-	
14.	Management of Saline Soils	UAS, Bangalore	Paddy		10	3	
15.	Aerobic Paddy Cultivation	UAS, Bangalore			4	1	
16.	Ragi based sequential cropping system	UAS, Bangalore	Ragi		12	1	
17.	ICM in Maize	UAS, Bangalore	Maize		12	1	
18.	ICM in Mango	IIHR, Bangalore	Mango		10	2	
19.	Micro nutrient in Banana	IIHR, Bangalore	Banana		10	2	
20.	IDM in Arecanut	CPCRI, Kasaragod	Arecanut		10	1	
21.	IDM in Pomegranate	IIHR, Bangalore	Pomegranate		10	1	
22.	Popularization of Arka Jay variety	IIHR, Bangalore	Dolichos		10	1	
23.	IPM in Cabbage	IIHR, Bangalore	Cabbage		10	1	
24.	ICM in Brinjal	IIHR, Bangalore	Brinjal		06	1	
25.	Integrated Crop Management in French bean	IIHR, Bangalore	French bean		10	3	

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2		1						14							
2		1						12		5	1				
					2		1	7	10	-	1				
3		2						20	4	1	2				
					4		1	59	40	9	9				
3		1										--	-	-	-
3								22							
				4		1		57		7		-			
2								28		6					
3		2													
				6		4		42	2						
				8		2		42		5					
4		1													
				9		1		113	15	11	3				
				4				30	6	1					
				9		3		26		3					
				10		2		20	4	1	2				
				8		2		19							

			10			61		13	4					
			10			70	3	3						
			10			14		4						
			8		2	15		5						
			7		3	20		7						
			4		2	24								
			8		2	27		1						

PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation		1			1		1			3
Integrated Pest Management								1		1
Integrated Crop Management			1			2				3
Integrated Disease Management		1								1
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total		2	1		2	1	1	1		8

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

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

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation	China Aster	Assessment of china aster varieties	5	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
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			33	33	16.2

4.B.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

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

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

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

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

4. C1. Results of Technologies Assessed

1. Ground nut														
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
								No of Pods/plant	Test weight(g)	Yield (kg./ha)				
1	2	3	4	5	6	7	8					10	11	12
Ground nut	Rain fed	Old variety , low yield and small size kernals	Evaluation of groundnut varieties	05	Assessment of TMV-2,GPBD-4 and GPBD-5 varieties	No of pods/plant, yield and economics	TO1:FP ,TMV-2	10.3	30.3	1431	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	NO	-
							TO2: GPBD-4	14.1	35.1	1695				
							TO3: GPBD-5	14.3	37.9	1851				

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): TMV-2	-	1431	Kg/ha	12930	1.43
Technology option 2 : GPBD-4	UAS,Dharwad	1695	Kg/ha	20850	1.70
Technology option 3 : GPBD-5	UAS,Dharwad	1851	Kg/ha	25530	1.85

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

Technology option 1 (Farmer's practice): TMV-2
Technology option 2 : GPBD-4
Technology option 3 : GPBD-5
- Source of technology : UAS,Dharwad
- Production system and thematic area : Rainfed and HYV
- Performance of the Technology with performance indicators: No. of pods/Plant, Test weight, Yield in kg/ha
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- Final recommendation for micro level situation: GPBD-4 and GPBD-5 Performed well with better test weight,
- Constraints identified and feedback for research : Nil
- Process of farmers' participation and their reaction: GPBD-5 Variety performed better with more test weight compared to other varieties.

2. Groundnut														
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	
							Technology Options	% Disease incidence	% Discolored seeds	% Yield (Kg/ha)	Less disease incidence and increased yield	1. Effective control of disease and higher yield 2. <i>Pseudomonas</i> culture should be made available	Nil	Nil
Ground Nut	Dry land	Severe incidence of Collar rot	Management of collar rot disease in groundnut	3	Recommended practice: ST with <i>Trichoderma</i> @ 4g/kg.	Percent Disease incidence.	Technology Option I	29.01	16.2	582				
					ST with <i>Pseudomonas fluorescens</i> @4g/kg seeds & soil treatment with <i>Pseudomonas</i> @ 2.5kg & Neemcake @ 2.5q with FYM 5 tons/ha.	Percent Discolored seeds	Technology Option II	17.6	11.5	880				
						Percent Yield	Technology Option III	11.2	7.1	1140				

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):		582	Kg/ha	10870	1.14
Technology option 2: ST with <i>Trichoderma</i> @ 4g/kg.	UAS, Bangalore	880	Kg/ha	19800	1.8
Technology option 3: ST with <i>Pseudomonas fluorescens</i> @4g/kg seeds & soil treatment with <i>Pseudomonas</i> @ 2.5kg & neemcake @ 2.5q with FYM 5 tons/ha.	PDBC, Bangalore	1140	Kg/ha	27900	2.3

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:
4. Technology Option 1 :

Technology option 1: (Farmer's practice)
Technology option 2 : Recommended practice: ST with <i>Trichoderma</i> @ 4g/kg.
Technology option 3 : Assessment: ST with <i>Pseudomonas fluorescense</i> @4g/kg seeds & soil treatment with <i>Pseudomonas</i> @ 2.5kg & neemcake @ 2.5q with FYM 5 tons/ha.
5. Source of technology: PDBC, Bangalore
6. Production system and thematic area: Rain fed situation and Disease management
7. Performance of the Technology with performance indicators: The lowest disease incidence and yield was recorded in Tech.Option-III (11.2%) and compared to Farmers practice (29.01%) and yield was 1140 kg/ha and 582 Kg/ha respectively.
8. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:
9. Final recommendation for micro level situation: ST with *Pseudomonas fluorescense* @4g/kg seeds & soil treatment with *Pseudomonas* @ 2.5kg & neemcake @ 2.5q with FYM 5 tons/ha.
10. Constraints identified and feedback for Research: ----
11. Process of farmer's participation and their reaction: Farmers were actively involved in group meetings and opined that it is low cost technology for effective control of disease.

3.Red gram														
Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter			Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement	
								Plant population	Plant height					Yield (kg/ha)
1	2	3	4	5	6	7	8			9	10	11	12	
Redgram	Rainfed	Low yield	Enhancing productivity in Redgram production system through transplanting	06	T1: Direct sowing at 60x15 cm T2: Direct sowing at 90x15 cm T3: Transplanting at 120x30cm T4: Transplanting at 120x45 cm	Plant population Plant height Yield (kg/ha)	TO1:FP	84573	150.3	1392	Higher yield is obtained in the recommended practice (TO2) as it has higher plant population. Among transplanting method transplanting at 120x45 cm is good	It is practically impossible to do it. It is difficult for poor farmers to follow it as transplanting cost is involved.	Direct sowing at 90x15 cm and raising some seedlings for gap filling	Cost of transplanting will be reduced and easy for gap filling
						TO2:	69474	155.0	1612					
						TO3:	27763	164.2	1401					
						TO4:	22135	169.8	1524					

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	-	1392	Kg/ha	39180	4.12
Technology option 2 : Direct sowing at 90x15 cm	UAS Bangalore	1612	Kg/ha	46920	5.21
Technology option 3 : Transplanting at 120x30cm	UAS Dharwad	1361	Kg/ha	36635	3.33
Technology option 4 : Transplanting at 120x45 cm	UAS Dharwad	1524	Kg/ha	42840	4.08

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 : Enhancing productivity in Red gram production system through transplanting
2. Problem Definition : Low yield
3. Details of technologies selected for assessment :

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
Technology option4: Transplanting at 120x45 cm
4. Source of technology : UAS,Banglore and UAS, Dharwad
5. Production system and thematic area : Rainfed
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 and laborious.
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 and farmer found it is laborious and expensive.

4. Mucuna													
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
								Bio-Mass	Yield (kg/ha)				
1	2	3	4	5	6	7	8			9	10	11	12
Mucuna	Rainfed	Low yield	Assessment of Mucuna (Medicinal Plant) as intercrop in Mango	4	T1: Mango + Ragi T2: Mango + Cowpea (Pulses) T3: Mango + Mucuna	Seed Production and Bio - Mass	TO1:FP	3.2 ton	950	Higher yield is obtained along with Bio-Mass in (TO 3) the compared to TO1	Low cost technology is (TO3) with minimal inputs	Nil	Nil
							TO2:	5.3 ton	230				
							TO3:	7.5ton	915				

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	-	950	kg/ha	5550	1.85
Technology option 2 : Mango + Cow Pea	UAS Bangalore	230	Kg/ha	3150	1.96
Technology option 3 : Transplanting at 120x30cm	IIHR, Bangalore CHES, Hirehalli	915	Kg/ha	22875	2.28

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 : Assessment of Mucuna (Medicinal Plant) as intercrop in Mango
- Problem Definition : Low yield
- Details of technologies selected for assessment :

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

- Source of technology : UAS,Bangalore and IIHR, Bangalore (CHES, Hirehalli)
- Production system and thematic area : Rainfed
- Performance of the Technology with performance indicators: Higher yield is obtained along with Bio-Mass in (TO 3) the compared to TO1
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Low cost technology is (TO3) with minimal inputs
- Final recommendation for micro level situation: Nil
- Constraints identified and feedback for research: Climber spread to Mango trees
- Process of farmers participation and their reaction: It is accepted by the farmers but they look for buy back arrangement for seeds and a few farmers expressed that it is good for organic farming.

5. Tomato													
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 Fruits/Plant	Fruit Yield (tons./ha)				
Tomato	Rain fed	Low yield	Assessment of tomato varieties for rain fed situation.	05	Assessment of DMT2, Vaibhav, Meghali	No of Fruits/plant, Fruit yield(tons/ha)	TO1:FP local variety	31.8	16.7	DMT-2 performed better than other varieties including check		NO	-
							TO2: DMT-2	49.3	23.2				
							TO3: Vaibhav	40.1	18.4				
							TO4:Arka Meghali	47.3	22.6				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, nuts/palm, lit/animal, 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	-	16.7	Ton/ha	33500	1.67
Technology option 2 : DMT-2	UAS,Dharwad	23.2	Ton/ha	61000	2.11
Technology option 3 : Vaibhav	UAS,Bangalore	18.4	Ton/ha	37000	1.67
Technology option 3 : Arka Meghali	IIHR Bangalore	22.6	Ton/ha	58000	2.05

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 : Assessment of DMT-2, Vaibhav and Meghali varieties
- Problem Definition : low yield in Rainfed situation
- 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
- Source of technology : UAS,Dharwad,UAS Bangalore and IIHR Bangalore
- Production system and thematic area : Rainfed and HYV
- Performance of the Technology with performance indicators: No. of Fruits/Plant, Yield in tons/ha
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- Final recommendation for micro level situation: DMT-2 and Arka Meghali gave better yield compared to other varieties
- Constraints identified and feedback for research : Nil
- Process of farmers' participation and their reaction: Arka Meghali and DMT -2 found to be superior than other varieties.

6.Banana											
Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Banana	Irrigated	Less population and low yield	Assessment of paired row and Pit method of planting	03	2.0 x1.2 x1.2mt paired row 3.6 x 1.8 m pit method						-
							On going				

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	UAS B	-	-	-	-
Technology option 3	NRCB, Tiruchirapalli	-	-	-	-
Technology option 4	NRCB, Tiruchirapalli	-	-	-	-

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

3 Details of technologies selected for assessment :

Technology option 1 (Farmer's practice): Local variety
Technology option 2 : 1.8 x1.8 mt
Technology option 3 : 2.0x1.2x1.2 mt
Technology option 4 : 3.6 x1.8 mt

4 Source of technology: 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 : -

9 Constraints identified and feedback for research : -

10 Process of farmers participation and their reaction : -

7..China Aster														
Crop/ enterprise	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	Justific ation for refine ment	
								No of flowers	Flower Diameter (g)					Yield (t/ha)
1	2	3	4	5	6	7	8			9	10	11	12	
China aster	Irrigated	Local variety & low yield	Assessment of china aster varieties	05	Assessment of Kamini and PG-pink varieties	No of flowers /plant Flower weight Yield t /ha	TO1:FP	26.5	4.0	2.25	More No of flowers per plant and yield compare to farmers practice	The assessed treatments performed very well when compared to farmers practice High yielding ability and Attractive colour	NO	-
							TO2	35.0	4.5	3.30				
							TO3	42.2	4.8	4.12				

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	-	2.25	t/ha	39,830	1.43
Technology option 2 : Kamini	IIHR, Bangalore	3.30	t/ha	66,520	2.0
Technology option 3 : PG -pink	MPKV, Rahuri	4.12	t/ha	91,120	2.8

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 : Assessment of China aster varieties
- Problem Definition : Local Variety & low yield
- Details of technologies selected for assessment :

Technology option 1 (Farmer's practice): Local variety
Technology option 2 : Kamini
Technology option 3 : PG -Pink
- Source of technology : IIHR Bangalore & MPKV, Rahuri
- Production system and thematic area : Irrigated and HYV
- Performance of the Technology with performance indicators: No. of flowers per plant, Flower diameter and Yield (t/ha)
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- Final recommendation for micro level situation: Kamini and PG pink performed well during the winter season
- Constraints identified and feedback for research : Nil
- Process of farmers participation and their reaction: The assessed treatments performed very well when compared to farmers practice which recorded higher yield and net income.

8. Coconut														
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
							8	9	10	11				
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	<p>Technology Option I : *Application of 20-25kg of FYM/palm, *250 gm/palm complex fertilizer.</p> <p>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)</p> <p>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)</p>	<p>Per cent Damage.</p> <p>Per cent Damage grade</p> <p>Yield/ Palm/Year</p>	<p>Technology Options</p> <p>Technology Option I</p> <p>Technology Option II</p> <p>Technology Option III</p>	<p>Per cent Damage</p> <p>65.2</p> <p>35.7</p> <p>31.6</p>	<p>Per cent Damage grade</p> <p>3.3</p> <p>2.5</p> <p>1.9</p>	<p>Yield/ 100Palm /Year</p> <p>7500</p> <p>14300</p> <p>16700</p>	Less mite infestation 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 complex fertilizer.	Nil	7500	nuts/100 palm/year	29980	4.5
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)	UAS, Bangalore	14300	nuts/100palm/year	68500	5.8
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).	TNAU, CBE	16700	nuts/100palm/year	90100	6.71

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 : Integrated management of Eriophid mite in coconut
- Problem Definition : Severe mite incidence results in quality deterioration of nuts.
- 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).

- Source of technology: TNAU,CBE
- Production system and thematic area: Rain fed situation and Pest management
- Performance of the Technology with performance indicators: Highest returns obtained in the Tech. option III (Rs.90100) compared to Farmers practice (Rs29980)
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:
- 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)
- Constraints identified and feedback for Research: Uniform method of management of pests was not followed by cluster of peoples.
- Process of farmers participation and their reaction: The technology has been highly influenced by the farming community, it should be effectively implemented at community level.

4.D1. Results of Technologies Refined

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined t	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	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
Technology Option 1 (best performing Technology Option in assessment)					
Technology Option 2 (Modification over Technology Option 1)					
Technology Option 3 (Another Modification over Technology Option 1)					

4.D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the following details:

1. Title of Technology refined
2. Problem Definition
3. Details of technologies selected for refinement
4. Source of technology

- 5 Production system and thematic area
- 6 Performance of the Technology with performance indicators
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation
- 9 Constraints identified and feedback for research
- 10 Process of farmers participation and their reaction

PART V - FRONTLINE DEMONSTRATIONS

5. A. Summary of FLDs implemented during 2011-12

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
1	Cereals	Rainfed	Kharif 2011	Paddy	MAS-946-1		ICM	Aerobic Paddy cultivation	1	1		4	4	
2		Irrigated	Kharif 2011	Paddy	IR30864		ICM	Management of Saline Soils	2	2	1	9	10	
3		Irrigated	Kharif 2011	Maize		NAH-1137	ICM	ICM in Maize	5	5	2	10	12	
4	Millets	Rainfed	Kharif 2011	Cow pea - Ragi	C-152 ML-365		Cropping System	Sequential cropping of Cowpea followed by Ragi	5	5	3	9	12	
5	Vegetables	Irrigated	Rabi-2011	Brinjal	-	Arka-Anand	ICM	ICM in Brinjal	1	1	2	4	6	
6		Irrigated	Kharif 2011	Tomato		Arka Ananya	ICM	ICM in Tomato	2	2	2	8	10	
7		Irrigated	Kharif 2011	Tomato		PrivaTE Hyb Seed	INM	Microbial consortium in tomato	2	2	4	6	10	
8		Irrigated	Kharif 2011	Frenchbean	Arka Suvidha		ICM	ICM in Frenchbean	2	2	2	8	10	
9		Irrigated	Rabi 2011	Dolichos	Arka Jay		Popularization of variety	Popularization of Arka Jay	2	2	2	8	10	
10		Irrigated	Rabi 2011	Cabbage		Unnathi	IPM	IPM in Cabbage	2	2	3	7	10	
11	Fruit	Rainfed	Summer 2012	Mango	Alphanso		ICM	ICM in Mango	2	2	2	8	10	
12		Irrigated	Kharif 2011	Banana	G-9 and Yelliki		INM	INM in Banana	2	2		10	10	
13		Irrigated	Rabi 2011	Pomegranate	Bhagava		IDM	IDM in Pomegranate	2	2		10	10	
14	Plantation	Rainfed/Irrigated	Kharif 2011	Arecanut	Hirehalli Tall		IDM	IDM in Arecanut	100 palms	100 palms		10	10	

15			Kharif 2011	Arecanut	Local variety		INM	Nut splitting in Arecanut	2	2	1	4	5	
16	Implements (Groundnut Decorticator)	Rainfed	Rabi 2011	Ground nut	GPBD-4		Drudgery	Ground nut Decorticator	5 units	3 units	1	2	3	
17	Others (specify)	Rainfed	Summer 2012	Redgram	Local		PHT	Safe storage of pulses	5 units	5 units	1	4	5	

5.A. 1. Soil fertility status of FLDs plots during 2011-12

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1	Cereals	Rainfed	Kharif 2011	Paddy	MAS-946-1		ICM	Aerobic Paddy cultivation	Kharif 2011	M	L	M	Ragi
		Irrigated	Kharif 2011	Paddy	IR30864		ICM	Management of Saline Soils	Kharif 2011	M	L	M	Diancha
		Irrigated	Kharif 2011	Maize		NAH-1137	ICM	ICM in Maize	Kharif 2011	M	L	M	Groundnut
2	Millets	Rainfed	Kharif 2011	Cow pea - Ragi	C-152 ML-365		Cropping System	Sequential cropping of Cowpea followed by Ragi	Kharif 2011	M	L	M	Cowpea
3	Vegetables	Irrigated	Rabi-2011	Brinjal		Arka-Anand	ICM	ICM in Brinjal	Rabi-2011	M	L	M	Ragi
		Irrigated	Kharif 2011	Tomato		Arka Ananya	ICM	ICM in Tomato	Kharif 2011	M	L	M	Cowpea
		Irrigated	Kharif 2011	Tomato		Private Hyd. Seed	INM	Microbial consortium in tomato	Kharif 2011	L	L	M	Aster
		Irrigated	Kharif 2011	Frenchbean	Arka Suvidha		ICM	ICM in Frenchbean	Kharif 2011	M	L	M	Tomato
		Irrigated	Rabi 2011	Dolichos	Arka Jay		Popularization of variety	Popularization of Arka Jay	Rabi 2011	L	L	M	Ragi
		Irrigated	Rabi 2011	Cabbage		Unnathi	IPM	IPM in Cabbage	Rabi 2011	L	L	M	Maize
4	Fruit	Rainfed	Summer 2012	Mango	Alphanso		ICM	ICM in Mango	Summer 2012	M	L	M	-
		Irrigated	Kharif 2011	Banana	G-9 and Yelliki		INM	INM in Banana	Kharif 2011	L	L	M	Tomato
		Irrigated	Rabi 2011	Pomogranate	Bhagava		IDM	IDM in Pomogranate	Rabi 2011	M	L	M	-
6	Plantation	Rainfed/ Irrigated	Kharif 2011	Arecanut	Hirehalli Tall		IDM	IDM in Arecanut	Kharif 2011	M	L	M	-
		Irrigated	Kharif 2011	Arecanut	Local variety		INM	Nut splitting in Arecanut	Kharif 2011	M	L	M	
7	Others	Rainfed	Rabi 2011	Ground nut	GPBD-4		Drudgery	Ground nut Decorticator	Rabi 2011				-
8	Others	Rainfed	Summer 2012	Redgram	Local		PHT	Safe storage of pulses	Summer 2012				-

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

** BCR= GROSS RETURN/GROSS COST

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

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

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

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)			% Increase	*Economics of demonstration (Rs./unit)				*Economics of check (Rs./unit)					
					Demo				Check if any	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
					H	L	A											
Dairy																		
Poultry																		
Rabbitry																		
Pigerry																		
Sheep and goat																		
Duckery																		
Others (pLspecify)																		

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

** BCR= GROSS RETURN/GROSS COST

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check if any

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

Data on additional parameters other than yield (viz., additional income realized, employment generation, quantum of farm resources recycled etc.)

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

5. B.5. Farm implements and machinery

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m ² }	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m ²)				*Economics of check (Rs./unit) or (Rs./m ²)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Drudgery reduction	Drudgery reduction using groundnut decorticator		3 SHGs				1.Qty. of pods decorticated -21kg/hr	(Manual) 1.Qty. of pods decorticated -2kg/hr	95% increase in Qty. of deshelled kernels over manual (check)	-	-	-	-	-	-	-	-
							2.Qty. of De-shelled kernels – 12.kg/hr	2.Qty. of Deshelled kernels – 1.38kg/hr									
							3.Damaged kernels -1.1 kg/hr	3.Damaged kernels -0.06 kg/hr									

* 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	Demo	Local

Bengalgram																	
Redgram																	
Others (pl.specify)																	
Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Others (pl.specify)																	
Total																	
Cucumber																	
Tomato	ICM in Tomato	ArkaAnanya	10	2	416.3	231.8	317.5	248.5	27.77	42843	158750	115907	3.71	42843	124250	81407	2.90
Brinjal	ICM in Brinjal	ArkaAnand	6	1	256.2	235.8	249.6	218.2	14.4	30540	149760	119220	4.9	28650	120010	91360	4.1
Okra																	
Onion																	
Potato																	
Field bean																	
Others\ Cabbage	IPM in Cabbage	Unnati	10	2	20.1t/ha	12.4t/ha	15.3t/ha	12.2t/ha	25.4	32500	76500	44000	2.3	28600	61000	32400	2.1
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total			38	10													

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

Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development	01	20	-	20	21	-	21	41	-	41
Group dynamics	01	13	-	13	3	-	3	16	-	16
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others	02	69	-	69	6	-	6	75	-	75
ICT										
Role of KVK in dissemination of improved technologies	01	38	-	38	2	-	2	40	-	40
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	27	676	114	790	82	34	116	758	148	906

Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	30	598	191	789	60	47	107	658	238	896

Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	01	24	-	24	-	-	-	24	-	24

Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	01	15	12	27	02	02	04	17	14	31

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	01	23	3	26	-	-	-	23	3	26
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	01	23	3	26	-	-	-	23	3	26

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other Soil and water conservation	01	51	11	62	32	7	39	83	18	101
Total	01	51	11	62	32	7	39	83	18	101

7. G. Sponsored training programmes conducted

S.No.	Area of training	No. of Courses	No. of Participants										
			General			SC/ST			Grand Total				
			Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	Crop production and management												
1.a.	Increasing production and productivity of crops												
1.b.	Commercial production of vegetables												
2	Production and value addition												
2.a.	Fruit Plants												
2.b.	Ornamental plants												
2.c.	Spices crops												
3.	Soil health and fertility management												
4	Production of Inputs at site												
5	Methods of protective cultivation												
6	Others (pl.specify)												
7	Post harvest technology and value addition												
7.a.	Processing and value addition												
7.b.	Others (pl.specify)												
8	Farm machinery												
8.a.	Farm machinery, tools and implements												
8.b.	Others (pl.specify)												
9.	Livestock and fisheries												
10	Livestock production and management												
10.a.	Animal Nutrition Management												
10.b.	Animal Disease Management												
10.c.	Fisheries Nutrition												
10.d.	Fisheries Management												
10.e.	Others (pl.specify)												
11.	Home Science												
11.a.	Household nutritional security												
11.b.	Economic empowerment of women												
11.c.	Drudgery reduction of women												
11.d.	Others (pl.specify)												
12	Agricultural Extension												
12.a.	Capacity Building and Group Dynamics												
12.b.	Others (pl.specify)												
	Total												

Details of sponsoring agencies involved

- 1.
- 2.
- 3.

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	Post harvest technology and value addition										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3	Livestock and fisheries										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4	Income generation activities										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation	01	-	17	17	-	2	2	-	19	19
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total	01	-	17	17	-	2	2	-	19	19

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	05	80	40	120	6	10	16	-	-	-
Kisan Mela										
Kisan Ghosthi										
Exhibition	03	5000	1320	6320	300	250	550	500	154	654
Film Show										
Method Demonstrations	22	138	45	183	27	15	42	4	3	07
Farmers Seminar										
Workshop	05									
Group meetings	10	145	55	200	7	13	20			
Lectures delivered as resource persons	22	189	38	227	52	27	79	19	06	25
Newspaper coverage	14									
Radio talks	07									
TV talks	06									
Popular articles										
Extension Literature										
Advisory Services	286	347	32	379	42	15	57	54	-	54
Scientific visit to farmers field	147	185	44	229	20	05	25			
Farmers visit to KVK	177	273	24	297	35	07	42			
Diagnostic visits	117	109	14	123						
Exposure visits	02	68	16	84	3	6	9			
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns	1	150	3	153	7	3	10			
Farm Science Club Conveners meet										
Self Help Group Conveners meetings	03	-	35	35	-	04	04			
Mahila Mandals Conveners meetings										
Celebration of important days (specify)	03	19	49	68	17	35	52	1	-	1
Any Other Publications Abstracts	03									
Total	833	6703	1715	8418	516	390	906	578	163	741

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

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (Kg)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables	Breeder seeds					
	Tomato	Arka Alok		6.4Kg	6400	10
	Chilli	Arka Lohit		5.30 Kg	5300	15
	Brinjal	Arka Keshav		1.00 Kg	1000	20
	Pumkin	Arka Chandan		87.00 Kg	43500	50
	Ridge gourd	Arka Sujat		100.00 Kg	60000	100
	Okra	Arka Anamica		92.00 Kg	18400	30
	French bean	Arka Komal		403Kg	40300	45
		Arka Komal		500*Kg	50000	
	Dolichos	Arka Jay		100.00* Kg	10000	
	Onion	Arka Kalyan		144Kg	144000	40
	Brinjal	Arka Nidhi		20.00* Kg	20000	
	Amaranthas	Arka Arunima		100.00*Kg	20000	
	Cow pea	Arka Suman		250.00* Kg	25000	
	TL Seeds					
	Chilli	Arka Suphal		3Kg	3000	20
	Brinjal	Arka Shirish		6Kg	6000	15
	French bean	Arka Suvridha		100Kg	10000	18
	Cow pea	Arka Garima		30.00* Kg	3000	
	Papaya	Surya		5.00Kg	300000	22
	Drumstick	KDM-1/PKM-1		5.00 *Kg	7500	
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						

Forest Species						
Others (specify)						
Total				1957.7	773400	385

* Under processing and grading

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	Coleus	K2		3000 Cuttings	300	04
Plantation	Areca nut	Hirehalli tall		45000	675000	220
	Coconut	Arisikere tall		175	7000	04
	Bird of Paradise	-		4000	280000	20
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others(specify)						
Total				52175	962300	248

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide	Neem soap	600	75000	80
	Pogamia Soap	250	25000	33
Bio-fungicide	<i>Trichoderma</i>	200	20000	24
Bio Agents	<i>Pseudomonas florescence</i>	200	50000	30
Others Micronutrients fertilizers	Banana special	800	120000	130
	Vegetable Special	366	45750	100
Home Science	Amla Juice	100 lit	10000	85
	Amla Candy	50 kg	15000	234
	Amla Supari	5kg	1500	36
	Ragi Malt	30kg	4500	35
Total		2601	366750	787

9.D. Production of livestock materials

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

Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

**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.)

Jan- Mar- 2012 – 200 copies

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	1. Self Employment for Youth Through Tamarind Processing Yard at Thovinakere,Tumkur	Jagadish K.N., M.R. Hegde and L.B.Naik	01
	1. Aonla fruit: A rich source of Vitamin C	Radha R.Banakar and Somashekhar	01
	2. Value addition in Aonla for income generation by rural women	Radha R.Banakar and Somashekhar	01
Technical reports	IIHR Annual Report 2011-12 DARE Report Cabinet Report SAC Report NICRA Action Plan Report Amla Campaign Progress Report Integrated Mushroom unit Progress Report Mass Multiplication of Medicinal Plants project Report	KVK Staff	06
News letters	ICAR News letter IIHR News Letter KVK News letter CRIDA News letter		04
Technical bulletins	Land Resource Inventory of Durgada Nagenahalli Village, Koratagere Taluk, Tumkur District, Karnataka for Integrated Development Under NICRA Project	L.B.Naik and P.R.Ramesh	1000
Popular articles	-		
Extension literature	-		
Others (Pl. specify)	-		
TOTAL			1016

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	DVD	Technology Demonstration Component under NICRA Programme In three languages Viz., Kannada, Hindi & English	300

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

Success stories

The Broad outline for the case study may be

Title: Increased Productivity of Banana through Foliar Application of Banana Special

Background

Banana is second most important fruit crop of the district and it is grown mainly under pump set irrigation. The total area is 4929 ha. The planting is done in the month of June and January. The farmers of the district are not applying the recommended dose of fertilizers and they apply only DAP. It is also emphasize the micronutrient in the soil is very deficit particularly Zinc, Mg Fe and Ca. Due to the above facts there was a drastic reduction in yield to an extent of 30-35 per cent. Because of these problems farmers were getting an average yield of 20-25t/ha.

Interventions/Process/Technology

To overcome these problems and to get higher productivity in banana, the interventions were proposed under FLD during the year 2010-11 & 2011-12. Under this component IIHR Bangalore technology Banana Special was recommended 5 sprays @5 g/lit at 30 days interval starting from 5th month from the planting.

Impact

The impact of the assessment of recommended technology in banana cultivation in irrigated agro-ecosystem of Tumkur, the results have clearly indicated that by adoption of the above technology, the yield of the banana could be increased to an extent of average 20.1 %.

The demonstration of this technology have been widely publicized through different mass media's like news paper, radio & TV and widely used in the farmers training programme of the KVK.

Horizontal spread: Dissemination efforts made by this KVK with the proven results, the farmers of the district under irrigated agro-ecosystem are adopting different this technology to a greater extent (1597 ha).

Economics gains:

Performance indicators:

No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
		Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
		H	L	A										
10	2	37.7 t/ha	34.8 t/ha	35.3t/ha	29.4t/ha	20.1	95560	221699	126139	1.32	93610	199389	105779	1.13

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)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Areca nut	Application of Tank Silt @ 50tons/ha	Supply of nutrients , better drainage and aeration
2.	Pulses	Coating of Caster Oil to the pulses and stored in the earthen pots	Physical barriers for pest
3.	Mango	Ragi and Paddy husk as a mulching material	To check evaporation and weed growth
4.	Coconut	Root feeding with neem oil	Reduction of stem bleeding
5.	Tomato	Identification of tomato line with longer shelf life	To increase the shelf life

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

1. Identification of courses for farmers/farm women

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

2. Rural Youth

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

3. In service personnel

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

10.G. Field activities

- i. Number of villages adopted : 25
- ii. No. of farm families selected : 219
- iii. No. of survey/PRA conducted : 03

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Yet to be established

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

Sl. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples				
Water Samples				
Plant samples				
Manure samples				
Others (specify)				
Total				

Details of samples analyzed during the 2011-12:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples				
Water Samples				
Plant samples				
Manure samples				
Others (specify)				
Total				

10.I. Technology Week celebration during 2011-12 : No,

Period of observing Technology Week: From _____ to _____

Total number of farmers visited _____ :

Total number of agencies involved _____ :

Number of demonstrations visited by the farmers within KVK campus:

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)			
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week			

10. J. Interventions on drought mitigation (if the KVK included in this special programme)**A. Introduction of alternate crops/varieties**

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized

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

E. Seed distribution in drought hit states

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

F. Large scale adoption of resource conservation technologies

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

PART XI. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Micronutrient Management in Banana	20	50	105770	126200
ICM in French bean (Arka Suvidha)	10	25	44500	64030
ICM in Brinjal (Arka Anand)	10	20	91360	119220
Enhancement of Productivity of Finger millet by drought tolerant variety ML 365	70	30	8200	15600
Maximization of yield and low disease incidence by introduction of Maize hybrid- NAH 1137	13	25	33750	56310
Popularization of short duration Red gram Var-BRG-2	113	50	39180	48720
Foliar disease tolerant Ground nut variety GPBD-4	110	50	12930	20850
Use of Bio fertilizers and Bio pesticides in Pomegranate	68	25	532500	799500

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

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

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

- Infestation of Fruit fly in Mango was a major problem in mango growing area and proper fruit fly control technology measures were not followed because of the leasing practices among the farmers. The awareness created and demonstrated on use of fruit fly trap (IIHR technology) at the appropriate time and for effective control of fruit fly at critical stage. Nearly 52 farmers adopted the technology and also farmers realized that it is a low cost technology which is effective to control fruit fly in mango.

- As a result of on-campus trainings on Improved compost production method and vermi-composting composting to the farmers 60 beneficiaries were adopted the composting method (30 Per cent) and use of bio fertilizers and decomposing microorganisms (*Pleurotus*) for composting enrichment.
- Farmers have realized the importance of ICM technology (Vegetables) and only 40% 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 160 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 of Amla and ragi. A farm women group shown interest to start entrepreneurship on Instant masala powders.
- As a result of FLD & training programmes farmers accepted the technologies on safe storage method of Redgram and use of groundnut decorticator Model -4 (UAS Bangalore) as a drudgery reduction equipment.
- A commodity group started at Thovinakere Hobli, Koratagere taluk on Tamarind processing.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
State Department of Horticulture	Trainings, FLD, Joint Diagnostic Survey
State Department of Agriculture	Trainings, FLD, Joint Diagnostic Survey
Watershed Department	Training and Collaborative activities
Department of Animal Husbandry and Fisheries	Trainings and Technical information
Department of women and child development	Trainings
NBSS &LUP Bangalore	NRM and Survey
BAIF NGO, Tiptur	Trainings and Technical information
ORDER NGO, Tumkur	Trainings, FLD's and Technical information
AWARE NGO, Tumkur	Trainings
APART NGO Tumkur	Organic farming and group approach
MOTHER NGO Tumkur	Seed village concept
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

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	4.75 lakhs
Network Project on Climate Change on Impact, Adaptation and Vulnerability of Indian Agriculture to Climate Change	January 2011	CRIDA, Hyderabad	52 Lakhs
Mass Multiplication of Selected Medicinal Plants	August, 2011	NMMP, New Delhi	4 lakhs
Integrated Mushroom production unit	June, 2011	NHM Karnataka	15 lakhs

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

If yes, role of KVK in preparation of SREP of the district?

Collecting technical information and training programmes

Coordination activities between KVK and ATMA during 2011-12 :Nil

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings				
02	Research projects				
03	Training programmes				
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films				
	Books				
	Extension Literature				

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

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.	Integrated Mushroom production unit	Project approved under NHM Scheme	15 lakhs	15 lakhs	

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

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

12.F. Details of linkage with RKVY: - Nil-

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

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Coleus				K2	Cuttings	3000		300	
Areca nut	Jan, 2011			Hirehalli tall	Seedlings	45000		675000	
Coconut	Feb, 2011			Arisikere tall	Seedlings	175		7000	
Floriculture									
Bird of Paradise				-	Seedlings	4000		280000	
Fruits									
Vegetables									
Breeder seeds									
Tomato	12.09.11	15.3.12	0.1	Arka Alok	Seeds	6.4Kg		6400	
Chilli	15.6.11	20.12.11	0.1	Arka Lohit	Seeds	5.30 Kg		5300	
Brinjal	25.6.11	28.12.11	0.2	Arka Keshav	Seeds	1.00 Kg		1000	
Pumkin	8.6.11	18.10.11	0.5	Arka Chandan	Seeds	87.00 Kg		43500	
Ridge gourd	15.1.11	15.6.11	1.0	Arka Sujat	Seeds	100.00 Kg		60000	
Okra	13.10.11	12.2.12	0.5	Arka Anamica	Seeds	92.00 Kg		18400	
French bean	20.11.11	22.2.12	1.0	Arka Komal	Seeds	403Kg		40300	
	22.12.11	22.3.12	0.5	Arka Komal	Seeds	500*Kg		50000	
Dolichos	12.1.12	-	0.2	Arka Jay	Seeds	100.00*		10000	

						Kg		
Onion	15.5.11 Bulb 10.10.11 Seeds	6.10.11 4.4.12	0.3	Arka Kalyan	Seeds	144Kg		144000
Brinjal	6.2.12	-	0.1	Arka Nidhi	Seeds	20.00* Kg		20000
Amaranthas	17.2.12	-	0.2	Arka Arunima	Seeds	100.00*Kg		20000
Cow pea	18.2.12	-	0.2	Arka Suman	Seeds	250.00* Kg		25000
TL Seeds					Seeds			
Chilli	1.10.11	12.3.12	0.1	Arka Suphal	Seeds	3Kg		3000
Brinjal	6.8.11	15.4.12	0.1	Arka Shirish	Seeds	6Kg		6000
French bean	18.9.11	20.4.12	0.4	Arka Suvidha	Seeds	100Kg		10000
Cow pea	20.9.11	-	0.4	Arka Garima	Seeds	30.00* Kg		3000
Papaya	Previous year	18.1.12	0.2	Surya	Seeds	5.00kg		300000
Drumstick	25.11.11	-	0.2	KDM- 1/PKM-1	Seeds	5.00 *Kg		7500
Others (specify)								

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Neem soap	600		75000	
2	Pogamia Soap	250		25000	
3	<i>Trichoderma</i>	200		20000	
4	<i>Pseudomonas florescence</i>	200		50000	
	Others				
5	Banana special	800		120000	
6	Vegetable Special	366		45750	
7	Amla Juice	100 lit		10000	
8	Amla Candy	50 kg		15000	
9	Amla Supari	5kg		1500	
10	Ragi Malt	30kg		4500	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	

13.E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2010			
May			
June			
July			
August			
September			
October			
November			
December			
January 2011			
February			
March			

13.F. Database management

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

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Central Bank of India	Hessaraghatta					
With KVK							

14.B. Utilization of KVK funds during the year 2011-12 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	5130000	5130000	5129321
2	Traveling allowances	150000	150000	149772
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	124000	124000	124000
B	POL, repair of vehicles, tractor and equipments	128000	128000	128000
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	100000	100000	100000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	38000	38000	38000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	160000	160000	160000
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	75000	75000	75000
G	Training of extension functionaries	25000	25000	25000

	FFS	25000	25000	25000
<i>H</i>	Maintenance of buildings	20000	20000	20000
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory	0	0	0
<i>J</i>	Library	5000	5000	5000
TOTAL (A)		700000	700000	5979093
B. Non-Recurring Contingencies				
1	Works	7771000	--	-
2	Equipments including SWTL & Furniture	500000	500000	500000
3	Vehicle (Four wheeler/Two wheeler, please specify)	-	-	-
4	Library (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		8271000	500000	500000
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		14251000	6480000	6479093

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2009 to March 2010	100000	105000	33366	171634
April 2010 to March 2011	171634	383870	186708	367796
April 2011 to March 2012	367796	889085	494558	762323

15. Details of HRD activities attended by KVK staff during 2011-12

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
P.R.Ramesh	SMS (Soil Science)	Use & Maintenance of AWS	CRIDA, Hyderabad	3rd May 2011
Jyoti Appu Naik	Programme Assistant (Computer)	Future Strategies of ICT and E-learning of KVKs of Zone VIII	ZPD, Bangalore	3rd May 2011
K.N.Jagadish	SMS (Agril. Extn)	Information and Communication Technology in Agriculture (ICT-A) through Virtual Extension Platform	Tamil Nadu Agricultural University, Coimbatore on	9-10, August, 2011.
Jyoti Appu Naik	Programme Assistant (Computer)	Information and Communication Technology in Agriculture (ICT-A) through Virtual Extension Platform	Tamil Nadu Agricultural University, Coimbatore on	9-10, August, 2011.
Somashekhar	SMS (Plant Breeding)	Improved Vegetable cultivation	IIHR Bangalore	9 th to 13 th January,2012
Prashanth JM, Jagadish K.N. P.R.Ramesh & B.H. Gowda	SMS's	Dissemination of Horticultural technologies through KVK personnel	IIHR Bangalore	18 th to 19 th January,2012

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

- In collaboration with Karnataka state Panchayat Raj an Ambassador from United Kingdom Mr. Eric Pickles British Community Minister visited and interacted with farmers at KVK Hirehalli in presence of Dr. C Somashekar DC and ZP CEO, Tumkur.
- Dr. S. Ayyappan, Director General ICAR and Secretary DARE and Dr. S Prabhu kumar accompanied DG on 21.2.12 visited KVK Hirehalli as well as NICRA site.

SUMMARY FOR 2011-12

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management			
Varietal Evaluation	Groundnut	Assessment of Groundnut varieties	5
	Aster	Performance of Assessment of China Aster Varieties	5
	Tomato	Performance and assessment of tomato varieties	5
Integrated Pest Management	Coconut	Integrated Management of eriophid mite in Coconut	2
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	5
	Mango	Assessment of Mucuna (Medicinal plant) as intercrop in Mango	4
Integrated Disease Management	Groundnut	Management of Collar Rot disease in Groundnut	3
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
Integrated Nutrient Management			
Varietal Evaluation			
Integrated Pest Management			
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			

Summary of technologies assessed under refinement of various livestock

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

III. FRONTLINE DEMONSTRATION

Crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals	ICM	Aerobic Paddy cultivation		4	1.0	42.4	36.8	15.2			18250	50880	32630	1.8	16340	33120	16780	1.03
	ICM	Management of Saline Soils		10	2	36.0	30.7	17.3			27314	57580	30266	1.11	25820	46610	20790	0.81
	ICM	ICM in Maize		12	5	58.8	51.4	14.4			14250	70560	56310	3.9	12560	46260	33750	2.7
Millets	Cropping System	Sequential cropping of Cowpea followed by Ragi		12	5	Cowpea 5.6 & Ragi 21.4	16.2	32.1			6800	22400	15600	2.29	6020	14220	8200	1.36
Oilseeds																		
Pulses																		
Vegetables																		
	ICM	ICM in Brinjal		6	1	249.6	218.2	14.4			30540	149760	119220	4.0	28650	120010	91360	3.2
	ICM	ICM in Tomato		10	2	317.5	248.5	27.77			42843	158750	115907	3.71	42843	124250	81407	2.90
	INM	Microbial consortium in tomato		10	2	52.3 t/ha	42.4 t/ha	23.3			45760	156900	111140	2.42	41250	127200	85750	2.08
	ICM	ICM in French bean		10	2	126.3	98.4	28.35			24380	88410	64030	3.63	24380	68880	44500	2.83
	Popularization of variety	Popularization of Arka Jay		10	2	117.5	93.6	25.53			23832	82250	58418	3.45	23832	65520	41688	2.75
	IPM	IPM in Cabbage		10	2	15.3t/ha	12.2t/ha	25.4			32500	76500	44000	1.35	28600	61000	32400	1.13

	PHT	Safe storage of pulses		5	5 units	0.2 % damage to stored grains after 6 months in demonstration	7.2 % damage to stored grains after 6 months of in local											
	Total			144	32													

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

** BCR= GROSS RETURN/GROSS COST

Women empowerment

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
Women						
Pregnant women						
Adolescent Girl						
Other women						
Children						
Neonates						
Infants						
Children						

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit ect.)					
						Demonstration	Check											
	Drudgery	Ground nut Decorticator				1.Qty. of pods decorticated -21kg/hr 2.Qty. of De-shelled kernels – 12.kg/hr 3.Damaged kernels -1.1 kg/hr	(Manual) 1.Qty. of pods decorticated -2kg/hr 2.Qty. of Deshelled kernels – 1.38kg/hr 3.Damaged kernels - 0.06 kg/hr	95% increase in Qty. of deshelled kernels over manual (check)										
				3	3units													

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

** BCR= GROSS RETURN/GROSS COST

Others (pl.specify)										
Total										
Cucumber										
Tomato	Arka Ananya	10	2	317.5	248.5	27.77	42843	158750	115907	3.71
Brinjal	Arka Anand	6	1	249.6	218.2	14.4	30540	149760	119220	4.0
Okra										
Onion										
Potato										
Field bean										
Others Cabbage	Unnati	10	2	15.3t/ha	12.2t/ha	25.4	32500	76500	44000	1.35
Total										
Commercial crops										
Sugarcane										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total		38	10							

IV. Training Programme

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	03	99	-	99	10	-	10	109	-	109
Micro Irrigation/Irrigation										
Seed production	01	26	-	26	3	-	3	29	-	29
Nursery management										
Integrated Crop Management	01	14	-	14	-	-	-	14	-	14
Soil and Water Conservation	01	52	10	62	5	2	7	57	12	69
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others ICM in vegetables	02	50	-	50	4	-	4	54	-	54

Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production	02	53	3	56	-	-	-	53	3	56
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production	01	26	-	26	5	-	5	31	-	31
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development	01	20	-	20	21	-	21	41	-	41

Group dynamics	01	13	-	13	3	-	3	16	-	16
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others	02	69	-	69	6	-	6	75	-	75
ICT										
Role of KVK in dissemination of improved technologies	01	38	-	38	2	-	2	40	-	40
Agro-forestry	01	38	-	38	2	-	2	40	-	40
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	27	652	114	766	82	34	116	734	148	882

Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	30	598	191	789	60	47	107	658	238	896

Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	01	24	-	24	-	-	-	24	-	24

Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	01	15	12	27	2	2	4	17	14	31

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	01	23	3	26	-	-	-	23	3	26
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
Total	01	23	3	26	-	-	-	23	3	26

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other Soil and water conservation	01	51	11	62	32	7	39	83	18	101
Total	01	51	11	62	32	7	39	83	18	101

Details of Vocational Training Programmes carried out for rural youth

S.No.	Area of training	No. of Courses	No. of Participants									
			General			SC/ST			Grand Total			
			Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	Crop production and management											
1.a.	Commercial floriculture											
1.b.	Commercial fruit production											
1.c.	Commercial vegetable production											
1.d.	Integrated crop management											
1.e.	Organic farming											
1.f.	Others (pl.specify)											
2	Post harvest technology and value addition											
2.a.	Value addition											
2.b.	Others (pl.specify)											
3.	Livestock and fisheries											
3.a.	Dairy farming											
3.b.	Composite fish culture											
3.c.	Sheep and goat rearing											
3.d.	Piggery											
3.e.	Poultry farming											
3.f.	Others (pl.specify)											
4.	Income generation activities											
4.a.	Vermi-composting											
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.											
4.c.	Repair and maintenance of farm machinery and implements											
4.d.	Rural Crafts											
4.e.	Seed production											
4.f.	Sericulture											
4.g.	Mushroom cultivation	01	-	17	17	-	2	2	-	19	19	
4.h.	Nursery, grafting etc.											
4.i.	Tailoring, stitching, embroidery, dying etc.											
4.j.	Agril. para-workers, para-vet training											
4.k.	Others (pl.specify)											
5	Agricultural Extension											
5.a.	Capacity building and group dynamics											
5.b.	Others (pl.specify)											
	Grand Total	01	-	17	17	-	2	2	-	19	19	

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	286	436	54	776
Diagnostic visits	117	123		240
Field Day	05	136		141
Group discussions	10	220		230
Kisan Ghosthi				
Film Show				
Self -help groups	03	39		42
Kisan Mela				
Exhibition	03	6870	654	7527
Scientists' visit to farmers field	147	254		401
Plant/animal health camps				
Farm Science Club				
Ex-trainees Sammelan				
Farmers' seminar/workshop				
Method Demonstrations	22	225	7	254
Celebration of important days	01	30		31
Special day celebration	03	138		141
Exposure visits	01	93		94
Others (pl.specify)				
Total	598	8564	715	9877

Details of other extension programmes

Particulars	Number
Electronic Media	13
Extension Literature	
News Letter	01
News paper coverage	14
Technical Articles	
Technical Bulletins	01
Technical Reports	09
Radio Talks	07
TV Talks	06
Animal health amps (Number of animals treated)	
Others	03
Research papers	
Total	54

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
Cereals (crop wise)					
Oilseeds					
Pulses					
Commercial crops					
Vegetables	Breeder seeds				
	Tomato	Arka Alok	6.4Kg	6400	10
	Chilli	Arka Lohit	5.30 Kg	5300	15
	Brinjal	Arka Keshav	1.00 Kg	1000	20
	Pumkin	Arka Chandan	87.00 Kg	43500	50
	Ridge gourd	Arka Sujat	100.00 Kg	60000	100
	Okra	Arka Anamica	92.00 Kg	18400	30
	French bean	Arka Komal	403Kg	40300	45
		Arka Komal	500*Kg	50000	
	Dolichos	Arka Jay	100.00* Kg	10000	
	Onion	Arka Kalyan	144Kg	144000	40
	Brinjal	Arka Nidhi	20.00* Kg	20000	
	Amaranthas	Arka Arunima	100.00*Kg	20000	
	Cow pea	Arka Suman	250.00* Kg	25000	
	TL Seeds				
	Chilli	Arka Suphal	3Kg	3000	20
	Brinjal	Arka Shirish	6Kg	6000	15
	French bean	Arka Suvidha	100Kg	10000	18
	Cow pea	Arka Garima	30.00* Kg	3000	
	Papaya	Surya	5.00Kg	300000	22
	Drumstick	KDM-1/PKM-1	5.00 *Kg	7500	
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					

Others (specify)					
Total			1957.7	773400	385

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
Commercial					
Vegetable seedlings					
Fruits					
Ornamental plants					
Medicinal and Aromatic	<i>Coleus</i>	K2	3000 Cuttings	300	Being sold at KVK
Plantation	Areca nut	Hirehalli tall	45000	675000	87
	Coconut	Arisikere tall	175	7000	04
	Bird of Paradise	-	4000	280000	Being sold at KVK
Spices					
Tuber					
Fodder crop saplings					
Forest Species					
Others					
Total			52175	962300	

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers
Bio Fertilizers				
Bio-pesticide	Neem soap	600	75000	80
	Pogamia Soap	250	25000	33
Bio-fungicide	<i>Trichoderma</i>	200	20000	24
Bio Agents	<i>Pseudomonas florescence</i>	200	50000	30
Others Micronutrients fertilizers	Banana special	800	120000	130
	Vegetable Special	366	45750	100
Home Science	Amla Juice	100 lit	10000	85
	Amla Candy	50 kg	15000	234
	Amla Supari	5kg	1500	36
	Ragi Malt	30kg	4500	35
Total		2601	366750	787

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2011-12

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil				
Water				
Plant				
Manure				
Others (pl.specify)				
Total				

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted -01

01.07.2011

IX. NEWSLETTER

Number of issues of newsletter published -01

Jan –March 2012 (200 copies)

X. RESEARCH PAPER PUBLISHED

Number of research paper published -03
1. Jagadish K.N., M.R. Hegde and L.B.Naik (2011)"Self Employment for Youth Through Tamarind Processing Yard at Thovinakere,Tumkur" during National Seminar on Attracting Farm Youth to Sustainable Agriculture scheduled on August 26 – 28, 2011 at UAS, Bangalore.
2. Radha R.Banakar and Somashekhar, (2011).Aonla fruit: A rich source of Vitamin C. <i>In: Proceedings of National Conference on Recent trends in food science nutrition Research.</i> Jain University, Bangalore. December 15,2011, PP-97.
3. Radha R.Banakar and Somashekhar, (2012). Value addition in Aonla for income generation by rural women, <i>In:NCOFTECH EDITION II(ISBN 978-93-81450-37-6), during National Conference on appropriate technologies for Indian food processing industries.</i> GKVK Bangalore, March 5-6, 2012.pp-156.

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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