PROFORMA FOR ANNUAL REPORT 2011-12

(FOR THE PERIOD APRIL 2011 TO MARCH 2012)

KRISHI VIGYAN KENDRA (TUMKUR)

PART I - GENERAL INFORMATION ABOUT THE KVK

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

Address	Tele	phone	E mail	Web Address
KVK, Konehalli,	Office	FAX	kvktumkur@gmail.com	
Tiptur ,Tumkur	08134-			
	294771			

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

Address	Telephone		E mail	Web Address
	Office	FAX		
University of	080-	080-	vc@uasbangalore.edu.in	www.uasbangalore.edu.in
Agricultural	23332442	23332442		
Sciences, GKVK	09449866900			
Bangalore - 65				

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

Name	Telephone / Contact			
	Residence	Mobile	Email	
Kumara, O		9449866936	kvktumkur@gmail.com	

1.4. Year of sanction: 2004

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 Coordinator	Kumara, O	Programme Coordinator	Male	Agronomy	P.hd	15600- 39100	(Rs 22,320)	10/12/11	Permanent	SC
2	SMS	Mamatha H.S.	Subject Matter Specialist	Female	Home Science	M.Sc(H.Sc)	15,600- 39,100	(Rs. 19,050)	27/02/07	Permanent	Others
3	SMS	Manjunath Sugur	Subject Matter Specialist	Male	Animal Science	M.V.Sc	15,600- 39,100	(Rs. 18,320)	05/07/09	Permanent	Others
4	SMS	K.M. Srinivas Reddy	Subject Matter Specialist	Male	Agril Entomology	P.hd.	15,600- 39,100	(Rs 16,920)	15/07/09	Permanent	Others
5	SMS	Nagappa Desai	Subject Matter Specialist	Male	Horticulture	M.Sc(Agri.)in Hort.	15,600- 39,100	(Rs. 16,920)	17/07/09	Permanent	Others
6	SMS	Shankara, M.H	Subject Matter Specialist	Male	Agri. Extension	M.Sc(Agri Extn)	15,600- 39,100	(Rs.15,600)	26/10/11	Permanent	OBC
7	SMS	Ramesh Babu, S	Subject Matter Specialist	Male	Soil Science	M.Sc(SS & AC)	15,600- 39,100	(23,000)*	08/02/12	Temporary	OBC
8	Programme Assistant(Lab Tech.)/T-4	Priyanka	Programme Assistant	Female		B.Sc (Hort)	10,800- 20,025	(9,300)*	29/12/09	Temporary	Others
9	Programme Assistant (Computer)/ T-4	Roopa .C.H	Computer Programmer	Female		B.Sc (computer science)	9300- 34800	(9,710)	21/01/11	Permanent	Others
10	Programme Assistant/ Farm Manager	Vacant	Farm Manager								
11	Assistant	Karthik S.M	Assistant	Male		B.Com	8,000- 13,450	(8000)*	15/06/10	Temporary	Others
12	Jr. Stenographer	Vacant	Jr. Stenographer								
13	Driver	Chandrashekarappa Angadi	Driver	Male		7 th Standard	7275- 13,350	(Rs. 11,400)	04/06/03	Permanent	Others
14	Driver	Mallikarjuniah B	Driver	Male		S.S.L.C	7275- 13,350	(Rs. 7,800)	18/02/10	Permanent	Others
15	Supporting staff	Manjaiah L	Supporting staff	Male		S.S.L.C	5200-100- 8200 (5200)	(Rs.5,500)	19/11/08	Permanent	SC
16	Supporting staff	Manjunatha, M.S	Supporting staff	Male		S.S.L.C	4800-100- 7275 (4800)	(Rs. 5,300)	03-05-2011	Permanent	Others

1.6. Total land with KVK (in ha)

	22	$\Delta 1$	
•	74	.0ha	ì
•	40	viic	Į

S.	Item	Area (ha)
No.		
1	Under Buildings	1 ha
2.	Under Demonstration Units	Nil
3.	Seed production	8.8 ha
4.	Orchard	13 ha(Recently established under Rainwater harvesting project)
5.	Farm pond	0.2 ha
	Total	23.0 ha

1.7. Infrastructural Development:

A) Buildings

11) 2	uldings	Source			Stage				
S.	Name of	of	of Complete			Incomplete			
No.	building	funding	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction	
1.	Administrative Building			s. 55,00,000 Rs. 25,00,000				construction completed	
2.	Farmers Hostel	ICAR		550 Sq.M	53,00,000			Under construction	
3.	Staff Quarters (6)								
4.	Demonstration Units (2)								
5	Fencing								
6	Rain Water harvesting system	ICAR	30-03-08		9,52,000				
7	Threshing floor			Not sar	nctioned				
8	Farm go down								

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep	2004	5,00,000	184802	Good
Mahindra BOLERO				
Tractor			2753.5hr	
Massey Fergusion	2002	3,80,000		Good
Bike	2006	40,000	33899	Good
TVS Star City				
TVS VICTOR(UAS	2003	50,000	34167	Good
Vehicle)				
Honda activa	2009	50,000	17122	Good

C) Equipments & AV aids

Sl. No.	Name of Equipments	Year of purchase	Cost (Rs.)	Present status
1	Photo Copier	30-03-2002	77,954	Not
	-			working
2	Generator (10 KV)	01-04-2002	86,100	Good
3	Over Head Projector (OHP)	28-05-2002	15,976	Good
4	Camera Pentax –SLR	31-07-2002	25,000	Good
5	Public Address System	31-07-2002	21,500	Good
6	Kodak Ektalite Slide Projector with	05-04-2003	47,125	Good
	slide tray			
7	Philips TV 21 inches + VGuard	20-05-2003	12,513 + 882	Good
	Stabilizer			
8	Philips DVD Player 625 K	20-05-2003	8,276	Good
9	LYNX Stevenson Screen Single	04-07-2003	6,000	Good
10	Trolley Stand	05-04-2003	7,655	Good
11	Bee hive boxes (12 nos.)	06-01-2003	7,800	Good
12	Nova easy carry display system (1 set)	06-01-2003	14,000	Good
13	Nova cardinal writing board (3' x 4')	05-04-2003	5,742	Good
14	Philips 21" TV	19-12-2004	Gift with Bolero	Good
	-		jeep	
15	HP Deskjet 3745 Printer	12-03-2005	3,400	Good
16	HP Scanjet 2400 Scanner	12-03-2005	4,400	Not
	-			working
17	Thoshiba Projector	14-06-2007	60,106	Good
18	Honda weed cutter	17-02-2009	30,000	Good
19	m			

1.8. Details SAC meeting conducted in 2011-12: $\ensuremath{\mathrm{NIL}}$

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1	Ragi, Paddy, Ground nut, Redgram, Coconut, Vegetables, Arecanut, Dairying, Sericulture

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

	puon of Agro-chinauc Zone & major agro ecolo	
Sl. No	Agro-climatic Zone	Characteristics
1	Central Dryzone (Zone - 4)	Red sandy soil mixed with clay soil and
	Madhugiri, Pavagada, Sira, Koratagere,	patches of black soil
	Tiptur and C.N. Halli taluk	Average rain fall 606.81 mm
	The second secon	Source of irrigation are small tanks,
		borewells
2	Eastern dryzone (Zone -5)	Red clay loam and clay lateritic soil
	Tumkur and Gubbi taluk	Average rainfall 768.16 mm
		Source of irrigation are tanks, wells and
		borewells
3	Southern dryzone (Zone-6)	Red sandy soil mixed with clay soil.
	Kunigal and Turvekere taluk	Average rainfall 750.56
		Source of irrigation are small tanks and
		borewells

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

2.3 Soil type/s

S. No	Soil type	Characteristics	Area (ha)
1	Red sandy loam	Soil contains 75-80% sand, silt 5-15% and clay 16-20%. Depth of the soil is shallow to medium. The clay fraction of red soils is rich in kaolinitic type of clay minerals. medium in fertility	6,15,230
2	Shallow black soils	Depth of the soil is shallow, water holding capacity is poor, low fertility	2,45,432
3	Red loamy soils	Red loams characterized by argillaceous soils with a cloddy structure and the presence of only a little concretionary material. Soils contain 31 – 34 % sand and 44 to 47% silt and 22 to 25 % clay, medium to high fertility. "N" is below 0.1 percent	2,04,093

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

S. No	Crop	Area (ha)	Production	Productivity (Qtl
			(Qtl)	/ha)
1	Paddy	33,508	13,89,241	41.46
2	Ragi	1,92,009	38,28,659	19.94
3	Jowar	756	5,503	7.28
	Maize	25,026	6,30,154	25.18
4	Redgram	10,192	83,258	6.15
5	Ground nut	93,028	8,01,421	5.60

6	Sunflower	12092	55,865	4.62
7	Cotton	738	4,087 bales	336 kg lint
8	Banana	3907	1,29,712 ton	33.2 ton
9	Tomato	673	51,821 ton	77 ton
10	Brinjal	356	13,884 ton	39 ton
11	Tamarind	2278	21,868 ton	9.6 ton
12	Chilli	3199	37,428 ton	11.7 ton
13	Coconut	1,22,469	13174.4 ton	46nuts/palm/yr
14	Arecanut	19044	26040.0 ton	10.62q/ha/yr

(Source: Dept of Agriculture, Tumkur)

2.5. Weather data

Month	Rainfall	Temper	rature ⁰ C	Relative
	(mm)	_		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)

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

Category	Population	Production(milk) 000 tons	Productivity(lt/animals)	
Cattle				
Crossbred	63704	54	5.5745	
Indigenous	440888	56	2.0671	
Buffalo	217528	68	2.5382	
Sheep meat 000 tons				
Crossbred	9			
Indigenous	884643	17.31		
Goats	322373	16.60		
Pigs				
Crossbred	905	0.23		
Indigenous	12411			

Rabbits	560	NA			
Poultry	egg production in lakhs				
Hens					
Desi	6,42,382	273			
Improved		71			

Category	Area	Production	Productivity
Inland(Fishes)	1306 ha	16,000 metric	650-700 kg/ha
		ton	

(Source: Dept of Animal husbandry and veterinary sources)

2.7 District profile has been Updated for 2011-12 Yes / No: Yes

2. 8 Details of Operational area / Villages

. O Dei	ans or Oper	rational area /	v mages				
SI. 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	Tiptur	Beligere Nonavinakere	Kamagondanahalli, Echanur Lakkihalli, Nagatihalli, Gowdanakatte Mathihalli Rangapura Siddapura, Nonavinakere Ganganaghatta Karikere	1 year 3 year 2 year 3 year 2 year 2 year 2 year	Ragi Greengram Sesamum Sunflower castor Coconut dairy	Budnecrosis in Sunflower Yellow mosaic in greengram Use of local variety Stem bleeding in Coconut Semi looper in Castor Low milk yield in animals	Maintaining crop productivity through soil & pest management
2	Turvekere	Kondajji Dabbegatta	Kondajji Harikaranahalli Hullenahalli Devihalli Hindumaranahalli	4 year 3 year 2 year 4year 1 year	Ragi Paddy Dairy Coconut Arecanut	Use of own seeds in ragi and paddy Mastritis in dairy animals Poor water management Red palm weevil	Introduction of high yielding varieties Nutrient and water management
3	C.N. Halli	Handanakere Huliyar Kasaba	Kallahalli Thammadihalli Chikkannigere Byrapura Kuppur	2 year 3 year 3 year 2 year 2 year	Ragi Greengram Sesamum Coconut Redgram	Low yield due to use of own seeds Mites, stem bleeding ,yellow mosaic	Maintaing productivity through introduction of high yielding variety Pest management
4	Kunigal	Hutridurga Kasaba Amruthur	Yaliyur Sanaba Ippadi	2 year 2 year 1 year	Ragi Paddy Banana Tomato Chilli Dairy	Low yield in ragi and paddy Low milk yield in animals	Maintaining productivity through use of high yielding variety Sustainable milk yield

5	Gubbi	Kasaba	Hogavanghatta Chelur Prabhvanahalli C.S. Pura Herur Nittur Sagaranahalli Kittadagupper Ammanaghatta R.S. Palya Honnashettihalli Yadavanahalli	2 year 3 year 2 year 3 year 3 year 2 year 3 year 2 year 2 year 2 year	Redgram Ragi Paddy Animal husbandry	Low yield due to use of own seeds Pest and diseases Low yield from dairy and other enterprises	Maintaining productivity Sustainable income generation through animal husbandry activities
6	Sira	Tavarekere	Kotta Mosarukunte Bukkapatna	2 year 3 year 2 year	Sunflower Groundnut Redgram Ragi Jasmine	Incidence of pod borer Low yield in groundnut due to use of local varieties Bud necrosis in Sunflower Poor nutrient management	Maintaining productivity through introduction of high yielding varieties soil & pest management

2.9 Priority thrust areas

Sl. No	Thrust area
1	Maintaining crop productivity
2	Integrated nutrient management
3	Integrated pest management
4	Processing and value addition of agriculture
	produce
5	Promotion of fodder varieties
6	Soil and water conservation
7	Promotion of dry land horticulture
8	Income generating activities for SHG's

PART III - TECHNICAL ACHIEVEMENTS

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

	C	FT			FLD			
1					2			
Nun	Number of OFTs Number of farmers		Nun	nber of FLDs	Number o	Number of farmers		
Targets	Achievement	Targets	Achievement	Targets	Targets Achievement		Achieve	
							ment	
9	8	39	44	27	25	301	282	

Training				Extension Programmes			
3				4			
Num	ber of Courses	f Courses Number of Participants Number of Prog		of Programmes	Number of participants		
Targets	Achievement	Targets	Achievement	Targets Achievement		Targets	Achievement
98	143	3160	6087	06	7	120	520

Seed	Production (Qtl.)	Planting mate	erials (Nos.)					
	5	6						
Target	Achievement	Target	Achievement					
237 q	164.67 q							

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

3.D1.	ADSII ACT OI	miei ventioi		sed on thrust areas identified for the district as given in Sl.No.2.7 Interventions										
S. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	prod	oly of io lucts
1	Enhancing crop productivity	Redgram	1.Use of local seeds 2.Seed treatment not followed 3.Improper nutrient management 4.Improper IPM measures (Pod borer, mites, Sterility mosaic, wilt) 5.Lack of awareness on use of pheromone traps and NPV	Enhancing the productivity in Red gram production system	Harnessing productivity in Redgram	3				235			No.	Kg
	Enhancing crop productivity	Greengram	-Use of local varieties (Own seeds) -Imbalanced nutrients -No seed treatment -lower seed rate -Incidence of Yellow mosaic & aphids	Yield and income maximizatio n in greengram based intercroppin g system	Enhancing the productivity through ICM	1				150				
	Enhancing crop productivity	Bengalgram	1.Use of local varieties(own seeds) 2.No seed treatment 3.Imbalanced fertilizer application 4.Gram pod borer 5.Wilt		Yield maximization in Bengal gram(JG-11)									
2	Enhancing crop productivity	Sunflower	1.Use of private hybrids 2.Poor nutrient management 3.No seed treatment 4.Bud necrosis 5.No intercropping 6. Multi heads	1 Yield and income maximizatio n in Sunflower based intercroppin g system		1				10				
	Enhancing crop productivity	Castor	1.Use of local varieties 2.Poor nutrition status of soil 3.Castor Semilooper 4.Botris grey mould rot		Yield maximization in Castor	2				30				
		Groundnut	1.Imbalanced fertilizers 2.Non use of gypsum 3.No seed treatment 4.Poor soil moisture conservation 5.RHCP, leaf miner, bud necrosis, tikka leafspot, collar rot 6. Difficulty in manual pod seperation		Integrated crop management in Groundnut	1		1		480				

3	ICM in paddy	Paddy	Higher weed menace Scarcity of labour for weeding Lower productivity Improper nutrient management Improper water management		1.Yield maximization in Paddy through crop management(Ta nu) 2. Blast management in Paddy for higher yield(BR-2655)	2			1	Tanu-400 BR-2655 500		
4	Enhancing crop productivity	Ragi	1.Use of local seeds 2.Imbalanced fertilizer application 3.Grown in rain fed conditions 4.Incidence of blast 5.Lower productivity		1. Maintaining productivity in Ragi through crop management(K MR-301) 2. Maintaining productivity in Green gram – Ragi based cropping system(GPU-48) 3. Yield maximization in Ragi(ML-365) 4. Yield maximization in Ragi(GPU-66)	9		2	1	GPU-48 20 kg		
5	Enhancing crop productivity	Little millet	1.Use of local varieties 2.Cultivated on marginal & submarginal lands 3.Improper nutrient management		Maintaining productivity in Same (Little millet)	2						
6	Enhancing crop productivity	Maize	Mono cropping, poor productivity, low income and poor soil fertility	Yield and income maximizatio n in Maize		1		1		30(maize) 50(soya been) 12(beans)		
7	Enhancing crop productivity	Chilly	*Use of local varieties *Incidence of murda complex *Low yield under rainfed condition	Performance asscessment of chilly hybrid Arka Swetha, Arka Haritha and Arka Meghana	Maintaining Productivity in Chillies	4	1			OFT: 200 gm FLD:2 kg		
8	Integrated nutrient, pest and disease manageme nt	Tomato	Lack of awareness on improved recent varieties - Improper nutrient , pest & disease management		Crop Management in Tomato	5	1			200gm		

	707.1	I 50 1 1 1	Tarr on the	1		-	1	ı	200			1	
	ICM and Pest	Brinjal	1.Use of Private varieties 2.Shoot and fruit borer with incidence		Crop and pest management in	3			200 gm				
	manageme		2.Shoot and fruit borer with incidence		Brinjal								
	nt				Dillijai								
9	Integrated	Banana	*Poor nutrient management	Higher	a)Nutrient	2				OFT:			
	nutrient		*Low productivity	productivity	management in					G-9			
	manageme			in banana	Banana					2000			
	nt			through high						seedlings			
				density									
			* 1 0 1	planting									
	Integrated nutrient	Arecanut	Lack of micronutrient application		Integrated nutrient	3							
	manageme		Poor water management		management in								
	nt				Arecanut								
10	Integrated	Coconut	*Improper nutrient management	1)Assessmen	Management of	5			Cow pea: 36				
	nutrient		*Low productivity	t of Mucuna	Ganoderma wilt				kg				
	and pest		*Incidence of mites	as intercrop									
	manageme			in Coconut									
	nt			production									
				system									
				2) Integrated management									
				of eriophid									
				mite in									
				coconut									
11	Azolla	Azolla	Not aware of nutritious valve of		Azolla	3					4 unit		
	cultivation		azolla		cultivation								
12	Backyard	Birds	Use of local birds having low genetic		Backyard	1					300 birds		
	rearing of swarndhara		potential.		rearing of swarndhara								
	layer birds				layer birds								
13	Up	Sheep	Use of local ram and leads to		Up gradation of	1					2		
	gradation	P	inbreeding		local sheep	-							
	of local				using Bannur								
	sheep				ram.								
14	Up	Goat	Use of local goats and leads to		Up gradation of	1					2		
	gradation		inbreeding		local goats								
	of local				using								
	goats				Jamunapuri buck								
15	Popularizat	Fodder	Not aware of improved varieties.		Demonstration	2					45 kgs		
15	ion of	1 34401	1.50 aare of improved varieties.		of fodder	_					15 Kg5		

3.B2. Details of technology used during reporting period

		Course of	Cnonlantar	No.c	of progi	rammes coi	nducted
S.No	Title of Technology	Source of technology	Crop/enterpr ise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	1)Harnessing productivity in Redgram 2)Enhancement of productivity in redgram based intercropping system	UAS Dharwad	Redgram	1	1	3	
2	Enhancing the productivity through ICM	UAS Dharwad	Greengram	1	1	1	
3	Yield maximization in Bengal gram(JG-11)	UAS Dharwad	Bengalgram		1		
4	Yield and income maximization in Sunflower based intercropping system	UAS Dharwad	Sunflower	1	1	1	
5	Yield maximization in Castor	UAS Bangalore	Castor		1	2	
6	Integrated crop management in Groundnut		Groundnut		1	2	
7	Yield maximization in Paddy through crop management(Tanu)	UAS, Bangalore	Paddy		1	1	
8	Blast management in Paddy for higher yield(BR-2655)	UAS, Bangalore	Paddy		1	1	
9	Maintaining productivity in Ragi through crop management(GPU-66)	UAS, Bangalore	Ragi		1	3	
10	Maintaining productivity in Green gram – Ragi based cropping system(GPU-48)	UAS, Bangalore	Ragi		1	3	
11	Yield maximization in Ragi(ML-365)	UAS, Bangalore	Ragi		1	3	
12	Yield maximization in Ragi(KMR-301)	UAS, Bangalore	Ragi		1	3	
13	Maintaining productivity in Same (Little millet)	UAS Bangalore	Same		1	2	
14	Yield and income maximization in Maize based intercropping system	UAS Bangalore	Maize	1		2	
15	Maintaining Productivity in Chillies	UAS, Bangalore	Chilli	1	1	5	
16	Crop Management in tomato	IIHR, Bngalore	Tomato		1	6	
17	Integrated crop management in Brinjal				1	3	
18	Nutrient management in Banana	IIHR, Bngalore	Banana	1	1	2	
19	Integrated nutrient management in Arecanut				1	3	
20	Integrated management of eriophid mite in coconut Management of Ganoderma wilt	CDB UAS Dharwad and UAS Bangalore	Coconut	1	1	5	
21	Azolla cultivation	KVFSU, Bidar	Azolla		1	3	
22	Back yard rearing of swarnadhara layer birds.	KVFSU, Bidar	Birds		1	1	
23	Up gradation of local sheep using Bannur ram.	KVFSU, Bidar	Sheep		1	1	
24	Upgradation of local goats using Jamunapuri buck	KVFSU, Bidar	Goat		1	1	
25	Maintaining productivity in fodder	UAS, Bangalore	Fodder		1	2	

3.B2 contd..

						No.	of farmer	s covered							
		OFT				FLD			Tı	raining			Other	s (Specify)
Gene	eral	SC/ST		Gener	al	SC/ST		Genera	al	SC/ST		Ger	neral	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	2	22	23	24
4	1	2		19	4	6	3	89	41	50	18				
2	1	1	1	7	2	2	1	14	3	8	2				
				18	5	5	3								
2	1	2						21	11	9	7				
2	1	1		8	3	2		36	7	15	4				
				4	3	2	1	21	8	12	4				
2		2		11	4	2	1	27	5	13	3				
				11	3	3	1	32	7	19	6				
				9	5	3	1	73	12	32	7				
				2				49	23	23	2				
				9	5	2	1	46	21	32	9				
				8	3	2		89	12	36	13				
				3	1	1		42	12	13	2				
3	1	1						21	4	7	4				
				5	2	1	1	82	36	29	18				
				3	1	1	1	111	24	44	12				
				3	1	1		82	22	17	5				
				2	1	2		32	17	14	7				
				3	1	1		48	21	14	12				
4	3	3	2	2	1	2		104		48					
				2	1	1		89	16	34	12				
				7	4	3	1	2	12	3	3				
				2				19		11					
				1		1		18	8	12	5				
				8	3	2	1	43	14	16	7				

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						1		1		2
Nutrient										
Management										
Varietal					1					1
Evaluation										
Integrated								1		1
Pest										
Management										
Integrated	1	1	2							4
Crop										
Management										
Total	1	1	2		1	1		2		8

- 4.A2. Abstract on the number of technologies refined in respect of crops :NIL
- 4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises: NIL
- 4.A4. Abstract on the number of technologies refined in respect of livestock enterprises : NIL

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Сгор	Name of the technology assessed	No. of trials	Numbe r of farmers	Area in ha (Per Trail covering all the Technological Options)
Integrated Nutrient Management	Coconut	Technology Option I : Farmer's practice : Coconut + sorghum/horsegram Technology Option II : Coconut + Cowpea Technology Option III : Coconut + Mucuna	7	7	2.8
	Banana	To1: 1.8m x 1.8m spacing (3000 pl/ha) To2: 2.1m x 2.1 m spacing (2268 pl/ha) To3: Paired row planting with zig zag method (2 m x 1.2m x 1.2m)	4	4	0.6
Varietals Evaluation	Chilly	Technology Option 1: Farmer's Practice(Private varieties/hybrids), not using imidocloprid & neem cake Technology Option 2: *Arka meghana, withNursery spray of imidacloprid @ of 0.3 ml/lt, root dipping in imidacloprid @ 0.3 ml/lt, *Application of neem cake @ 250kg/ha Technology Option 3: *Arka harita with Nursery spray of imidacloprid @ 0.3 ml/lt Root dipping in imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha Technology Option 4: Arka swetha withNursery spray of imidacloprid @ of	4	4	1.0

		0.3 ml/lt ,root dipping in imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha			
Integrated Pest Management	Coconut	Technological Option 1: Applying complex fertilizer, 200gm/palm, 10 kg FYM/palm Technological Option 2: 50FYM, 500:320:1200gm NPK/plant/year 5kg neemcake/palm, 50gm borax/palm/year 500gm MgSo ₄ /palm/year Eco neem 1% 10ml/palm, 3 times/year Technological Option 3: 50FYM, 500:320:1200gm NPK/plant/year 5kg neemcake/palm, coconut tonic(200ml/palm) twice a year in 6 month interval, 50gm borax/plant	5	5	100 palms
Integrated Crop Management	Greengram	Technology Option 1 :			
		*Use of local varieties * Unevenly prepared soils and higher seed rate *Sowing of ragi after harvest of greengram Technology Option 2: * Use of improved varieties *Sequence cropping grown: ragi after the harvest of greengram Technology Option 3: * Greengram and redgram intercropping (8:2) * Simultaneous sowing of greengram and redgram(BRG-1) during late April or early May *Transplanting of Ragi after the harvest of greengram Technology Option 4: * Greengram and redgram intercropping (8:2) * Simultaneous sowing of greengram and redgram(BRG-1) during late April or early May *Sowing of horsegram after the harvest of greengram	5	5	1.0
	Maize	Technology Option 1: *Continuous monocropping, use of Private hybrids, closer spacing 50cm x 20cm, multiheads, non adoption of intercropping, poor seed setting, improper nutrient management, extent of yield loss 40% Technology Option 2: * Intercropping of maize with soybean in 2:2 ratio, improvement in soil fertility due to leaf falling and other crop waste at harvest Technology Option 3: *Intercropping of maize with French bean in 2:2 ratio improves soil fertility and higher income	5	5	1

Total		44	44	9.4 ha (100 palms)
	* Pure cropping ,Closer spacing followed(60x15 cm) ,use of TTB-7 and Hyd-3C * Technology Option 2: *Direct sowing of redgram(90x 15cm spacing), use of BRG-1 improved variety * Technology Option 3: * Transplanting of 40 days old seedlings which are raised in polythene bags to achieve uniform stand and higher yield , spacing (120x30 cm spacing), using BRG-1 seeds	7	7	1
	farmers grow sunflower after sunflower crop, no intercropping is followed, closer spacing Technology Option 2:Rotation of crop, spacing i.e., 60x30cm Technology Option 3: Rotation of crops, spacing 60x30cm, Intercropping of sunflower and redgram in 2:1 ratio	5	5	2

4.B.2. Technologies Refined under various Crops :NIL

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

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

4.C1. Results of Technologies Assessed

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refine ment done	Justificati on for refineme nt
1	2	3	4	5	6	7	8	9	10	11	12
Greengram	Rainfed	Sole cropping, poor productivity, low income and poor soil fertility	Yield and income maximization in greengram based intercropping system	5	Technology Option 1: *Use of local varieties * Unevenly prepared soils and higher seed rate *Sowing of ragi after harvest of greengram Technology Option 2: * Use of improved varieties *Sequence cropping grown: ragi after the harvest of greengram Technology Option 3: * Greengram and redgram intercropping (8:2) * Simultaneous sowing of greengram and redgram(BRG-1) during late April or early May *Transplanting of Ragi after the harvest of greengram Technology Option 4: * Greengram and redgram intercropping (8:2) * Simultaneous sowing of greengram and redgram(BRG-1) during late April or early May * Simultaneous sowing of greengram and redgram(BRG-1) during late April or early May *Sowing of horsegram after the harvest of greengram	Yield of Individual crops and their economic gain	To1: Ragi 12 q/ha Greengram: 7 q/ha To2: (Ragi: 15.5 q/ha)- Greengram: 7.2 q/ha To3: Redgram: 7 q/ha Greengram: 5.70 q/ha) Ragi: 13 q/ha To4: Redgram: 7.2 q/ha Greengram: 5.8 q/ha Horsegram: 5.2 q/ha	To 1: Gross return: Rs27,500 Net return: Rs.19500 BC ratio: 2.75 To2: Gross return: Rs 34110 Net return: Rs.24110 BC ratio: 3.411 To 3: Gross return: Rs 34960 Net return: Rs 24960 BC ratio: 3.49 To3: Gross return: Rs 24960 BC ratio: 3.49 To3: Gross return: Rs 25,120 Net return: Rs. 25,120 BC ratio: 3.51	Farmers expressed that higher income can be obtained from adoption of TO2 and TO3.		Under aberrant weather condition

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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. / ha	BC Ratio
13		14	15	16	17
Technology option 1 (Farmer's practice)	Farmers practice	Ragi 12 q/ha Greengram: 7 q/ha	Q/ha.	19500	2.75
Technology option 2	UAS Bangalore	(Ragi: 15.5 q/ha)- Greengram: 7.2 q/ha	Q/ha.	24110	3.41
Technology option 3	UAS Dharwad	Redgram: 7 q/ha Greengram: 5.70 q/ha) Ragi: 13 q/ha	Q/ha.	24960	3.49
Technology option 4	UAS Dharwad	Redgram: 7.2 q/ha Greengram 5.8 q/ha Horsegram: 5.2 q/ha	Q/ha.	25120	3.51

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: Yield and income maximization in greengram based intercropping system
- 2 Problem Definition: Sole cropping, poor productivity, low income and poor soil fertility
- 3 Details of technologies selected for assessment

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	*Use of local varieties	Farmers	
		* Unevenly prepared soils and higher seed rate		
		*Sowing of ragi after harvest of greengram		
2.	Technological Option 1	* Use of improved varieties	UAS, Bangalore	Adoption of improved technologies
		*Sequence cropping grown: ragi after the harvest of greengram		results in higher yield
3.	Technological Option 2	* Greengram and redgram intercropping (8:2)	UAS, Dharwad	Higher net income and increase in
		* Simultaneous sowing of greengram and redgram(BRG-1) during late		soil productivity
		April or early May		
		*Transplanting of Ragi after the harvest of greengram		
4	Technological Option 3	* Greengram and redgram intercropping (8:2)	UAS, Dharwad	
		* Simultaneous sowing of greengram and redgram(BRG-1) during late		
		April or early May		
		*Sowing of horsegram after the harvest of greengram		

- 4 Source of technology: UAS Bangalore
- 5 Production system and thematic area: Rainfed and Intercropping system
- 6 Performance of the Technology with performance indicators:

To1:

Ragi 12 q/ha

Greengram: 7 q/ha

To2:

(Ragi: 15.5 q/ha)-Greengram: 7.2 q/ha

To3:

Redgram: 7 q/ha Greengram: 5.70 q/ha)

Ragi: 13 q/ha

To4:

Redgram: 7.2 q/ha Greengram 5.8 q/ha Horsegram: 5.2 q/ha

- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :
- 8 Final recommendation for micro level situation: Adoption of TO3 is beneficial
- 9 Constraints identified and feedback for research: Ragi –Greengram Horsegram system has improves soil fertility and well suitable to aberrant rainfall suituation
- Process of farmers participation and their reaction: Initially farmers showed curiosity and disinterest for the technology but later were happy with the technology

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 refinem ent done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Maize	Rainfed with protective irrigation	Mono cropping, poor productivit y, low income and poor soil fertility	Yield and income maximizati on in Maize	5	Technology Option 1: *Monocropping, use of Private hybrids, closer spacing 50cm x 20cm, multiheads, non adoption of intercropping, improper nutrient management, Extent of yield loss 40% Technology Option 2: *Intercropping of maize with soybean in 2:2 ratio, improvement in soil fertility due to leaf falling and other crop waste at harvest Technology Option 3: *Intercropping of maize with frenchbean in 2:2 ratio	Yield of Individual crops and their economic gain	To1: Maize: 45.0 q/ha To2: Soybean: 8.5 q/ha + Maize: 27 q/ha To3: Vegetable French bean 20 ton + Maize: 26q/ha	To1: Gross return: Rs. 49,500 Net return: Rs. 34,500 BC ratio: 3.13 To2: Gross return: Rs.50950 Net return: Rs. 35950 BC ratio: 3.26 To3: Gross return: Rs. 67,500 Net return: Rs. 52,500 BC ratio: 4.7	Higher net return can be obtained by going for TO3 as compared to TO2		By 90.95 dry vegetable French bean can be harvested and well suitable for intercroppi ng with maize

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Maize intercropping	Source of technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
Technology option 1 (Farmer's practice)		Maize: 45.0 q/ha	Q/ha.	34500	3.13
Technology option 2	UAS, B'lore	Soybean: 8.5 q/ha + Maize: 25 q/ha	Q/ha.	35950	3.26
Technology option 3	UAS, B'lore	Vegetable French bean 20 ton + Maize: 26q/ha	Q/ha.	52500	4.7

- 1 Title of Technology Assessed : **Yield and income maximization in Maize**
- 2 Problem Definition: Mono cropping, poor productivity, low income and poor soil fertility

3. Details of technologies selected for assessment/refinement

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	*Continuous monocropping, use of Private hybrids, closer spacing 50cm x 20cm, multiheads, non adoption of intercropping, poor seed setting, improper nutrient management, extent of yield loss 40%	Farmers	
2.	Technological Option 1	* Intercropping of maize with soybean in 2:2 ratio, improvement in soil fertility due to leaf falling and other crop waste at harvest	UAS, Bangalore	Adoption of recommended technologies results in higher yield
3.	Technological Option 2	*Intercropping of maize with frenchbean in 2:2 ratio	Innovative approach	Higher net income and soil productivity

- 4 Source of technology: UAS Bangalore
- 5 Production system and thematic area: Rainfed and Nutrient Management
- 6 Performance of the Technology with performance indicators :

To1:

Maize: 45.0 q/ha

To2:

Soybean: 8.5 q/ha + Maize: 25 q/ha

To3: Vegetable French bean 20 ton +

Maize: 26q/ha

- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation : Maize -French bean cropping system enhanced the income and effective utilization of land and time
- 9 Constraints identified and feedback for research : Maize -French bean cropping system paired cropping system
- Process of farmers participation and their reaction: Initially farmers showed curiosity and disinterest for the technology but later were happy as they acheved higher returns by going for option 3.

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
Redgram	Rainfed	Lesser germination percentage, uneven stand of crop, occurrence of late rains, lower fertility status of soil & higher incidence of pest & diseases leading to lower productivity of the cropping system	Enhancing the productivity in redgram production system through agronomical practices	7	*Pure cropping ,Closer spacing followed(60x15 cm) ,use of TTB-7 and Hyd-3C Technology Option 2: *Direct sowing of redgram(90x 15cm spacing), use of BRG-1 improved variety Technology Option 3 being assessed along with justification with Source *Transplanting of 40 days old seedlings which are raised in polythene bags to achieve uniform stand and higher yield , spacing (120x15cm spacing), using BRG-1 seeds	Plant height No. of pods Seed yield	To1: 12.5 To2: 14.5 To3: 16.5	TO1: GR: Rs.35,000 NR: 22000 B:C ration: 2.2 TO2: R:Rs.40600 NR:Rs.27600 B:C ration: 2.76TO3: GR:Rs.44800 NR:Rs.31800 B:C Ration:2.8	Farmers felt that an increase in yield can be obtained by going for TO3 as compared to TO1 but there was not much difference with respect to TO2		

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Redgram transplanting	Source of technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
Technology option 1 (Farmer's practice)	Farmers	Redgram: 5.50 q/ha	Q/ha	22000	2.2
Technology option 2	UAS Bangalore	Redgram: 6.25 q/ha	Q/ha	27600	2.76
Technology option 3	UAS Dharwad	Redgram: 7.0 q/ha	Q/ha	31800	3.18

- 1 Title of Technology Assessed : Enhancing the productivity in Red gram production system
- Problem Definition: Lesser germination percentage, uneven stand of crop, occurrence of late rains, lower fertility status of soil & higher incidence of pest & diseases leading to lower productivity of the cropping system
- 3 Details of technologies selected for assessment/refinement

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Technological Option 1 (Farmer's	Local variety	Farmers	
	Practice)			
2.	Technological Option 2	* Pure cropping ,Closer spacing	UAS Bangalore	
		followed(60x15 cm) ,use of TTB-7 and Hyd-		
		3C		
3.	Technological Option 3	*Transplanting of redgram(120x 15cm	UAS Dharwad	Better establishment and yield
		spacing), use of BRG-1 improved variety		

- 4 Source of technology: UAS Bangalore and Dharwad
- 5 Production system and thematic area: Rainfed and cropping system
- 6 Performance of the Technology with performance indicators:

To1: 12.5 q/ha

To2: 14.5 q/ha

To3: 16.5 q/ha

- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation: Transplanting of redgram is beneficial
- 9 Constraints identified and feedback for research: Scarcity of labour during transplanting time.
- Process of farmers participation and their reaction: Initially farmers showed curiosity and disinterest for the technology but later they were quite happy after observing the results.

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
Sunflower	Rainfed	No intercropping, lesser income, low soil fertility, closer spacing resulting competition for nutrients, space, moisture, light & incidence of bud necrosis and powdery mildew and poor nutrient status due to monocropping	Yield and income maximization in Sunflower based intercropping system	5	Technology Option 1: *farmers grow sunflower after sunflower crop *intercropping is not followed *Closer spacing i.e., 45x15cm Technology Option 2: *Use of KBSH-41 Crop rotation *Spacing of 60x30cm Technology Option 3: *Use of KBSH-41, Crop rotation *spacing 60x30cm *Intercropping of sunflower and redgram in 2:1 ratio in alfisols, since inclusion of redgram crop during early growth stages results efficient harvesting of space, light, moisture and nutrients *In addition, there is a possibility of biological nitrogen fixation by redgram and higher net income	Yield of Individual crops and their economic gain	To1: 12.5 q/ha To2: 14.5 q/ha To3: Sunflower 9.75 q/ha Redgram: 6.5 q/ha	To1: Gross return: Rs. 35,000 Net return: Rs. 22000 BC ratio: 2.69 To2: Gross return: Rs. 40,600 Net return: Rs.27,600 BC ratio: 2.99 To3: Gross return: Rs. 45500 Net return: Rs. 32500 BC ratio: 3.5	An increase in net return of Rs. 32500 obtained with the adoption of TO3 as compared to TO1 and Rs.2200 as compared to TO2. Rs. 27600 In addition there was improvement in soil fertility		-

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Sunflower intercropping	Source of Technology		Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
Technology option 1 (Farmer's practice)		Sunflower:	9.70 q/ha	q/ha	22000	2.69
Technology option 2	UAS, Bangalore	Sunflower:	10.20 q/ha	q/ha	27600	2.99
Technology option 3	DOR Hyderabad	Sunflower: Redgram:	6.75 q/ ha 2.50 q/ha	q/ha	32500	3.5

- 1. Title of Technology Assessed: Yield and income maximization in Sunflower based intercropping system
- 2. Problem Definition: No intercropping, lesser income, low soil fertility, closer spacing resulting competition for nutrients, space, moisture, light & incidence of bud necrosis and powdery mildew and poor nutrient status due to monocropping
- 3. Details of technologies selected for assessment/refinement

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Technological Option 1	Technology Option 1:	Farmers	
	(Farmer's Practice)	*farmers grow sunflower after		
		sunflower crop		
		*intercropping is not followed		
		*Closer spacing i.e., 45x15cm		
2.	Technological Option 2	Technology Option 2:	UAS, BANGALORE	
		*Use of KBSH-41 Crop rotation		
		*Spacing of 60x30cm		
3.	Technological Option 3	Technology Option 3:	DOR, Hyderabad	-An additional net income and
		*Use of KBSH-41, Crop rotation		increase in soil productivity
		*spacing 60x30cm		
		*Intercropping of sunflower and		
		redgram in 2:1 ratio in alfisols, since		
		inclusion of redgram crop during early		
		growth stages results		
		efficient harvesting of space, light,		
		moisture and nutrients		
		*In addition, there is a possibility of		
		biological nitrogen fixation by redgram		
		and higher net income		

- 4 Source of technology: UAS, Dharwad and DOR, Hyderabad
- 5 Production system and thematic area: Rainfed and intercropping system.
- 6 Performance of the Technology with performance indicators:

To1 9.70 q/ha
To2: 10.20q/ha
To3: Sunflower: 6.75 q/ha
Redgram: 2.50 q/ha

- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation: Adoption of TO3 is beneficial in terms of higher yield and soil fertility
- 9 Constraints identified and feedback for research: -- sunflower crop is infested with viral diseases
- Process of farmers participation and their reaction: farmers are happy with the technology and are ready to adopt these technologies in their fields.

Crop/ enterpris e	Farmin g situatio n	Problem definition	Title of OFT	No. of trial s	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinemen t needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Coconut	Rainfed	Low soil fertility, Lower income and more weeds infestatio n	Assessmen t of Mucuna as intercrop in Coconut production system	0 7	Technology Option I: Farmer's practice : Coconut + sorghum/horsegra m Technology Option II: Coconut + Cowpea/Avare Technology Option III: Coconut + Mucuna	No. of nuts/palm/yea r No. of nuts/ha/year Soil fertility status	To1: 72 nuts/palm/y r Soil fertility status improved To2: 85 nuts/palm/y r Soil fertility status medium 94 nuts/palm/y r Soil fertility status improved	To1:Gros s return: 62,000 Net return: 32,000 B:C ratio: 2.07 To 2:Gross return: 73,000 Net return: 43,000 B:C ratio: 2.43 To3:Gross return: 80,000 Net return: 50,000 SeC ratio: 2.67	Farmers express the higher income obtained from adoption of To3 with improved soil fertility status, increase the soil moisture conservatio n and reduce the weed growth		Mucuna as inter crop is more remunerative and controls the weeds effectively and fixes atmospheric nitrogen results in improvement in soil fertility status

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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)		72 nuts/palm/yr,	8856 nuts/yr/ha	32,000	2.07
Technology option 2	UAS, Bangalore	85 nuts/palm/yr	10455 nuts/yr/ha	43,000	2.43
Technology option 3	IIHR, Hesaraghatta	94 nuts/palm/yr	11562 nuts/yr/ha	50,000	2.67

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 Mucuna as intercrop in Coconut
- 2 Problem Definition : Low soil fertility, Lower income and more weeds infestation
- 3 Details of technologies selected for assessment:

Technology Option I : Farmer's practice : Coconut + sorghum/horsegram

Technology Option II: Coconut + Cowpea

Technology Option III: Coconut + Mucuna

- 4 Source of technology: **To2:** UAS, Bangalore **To3:** IIHR, Hesaraghatta
- 5 Production system and thematic area: rainfed, Intercropping system
- 6 Performance of the Technology with performance indicators:

To1: 72 nuts/palm/yr, 8856 nuts/yr/ha

To2: 85 nuts/palm/yr, 10455 nuts/yr/ha

To3: 94 nuts/palm/yr 11562 nuts/yr/ha

- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- Final recommendation for micro level situation: To3 has found more effective in weed control, improve the soil fertility status and soil moisture intern, yield has been improved.
- 9 Constraints identified and feedback for research: Poor germination
- 10 Process of farmers participation and their reaction : Good

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
Chilli	Irrigated	Vegetable production is becoming profitable day by day. Poor quality & pest incidence, results in stagnant yield. Control of pest & diseases is becoming costly due to decreasing resistance of plants. In chilli, pests like aphids, thrips, mites and powdery mildew & viral diseases are more severe leading to problems like development of disease complex called murda complex and other problems	Performance assessment of chilli hybrid Arka Swetha, Arka haritha and Arka Meghana	4	Technology Option 1: Farmer's Practice(Private varieties/hybrids), not using imidocloprid & neem cake Technology Option 2: *Arka meghana, withNursery spray of imidacloprid @ of 0.3 ml/lt, root dipping in imidacloprid @ 0.3 ml/lt, Application of neem cake @ 250kg/ha Technology Option 3: *Arka harita with Nursery spray of imidacloprid @ 0.3 ml/lt Application of neem cake @ 250kg/ha Technology Option 4: Application of neem cake @ 250kg/ha Technology Option 4: Arka swetha withNursery spray of imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha Technology Option 4: Arka swetha withNursery spray of imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha	Fruit length Fruit width Yield/ha(green chilli) Yield/ha(dry chilli)	To1: 8-9 cm 1-2 cm 185 qt 24.5 qt To2: 8-9 cm 1-3 cm 220 qt 28.5 qt To3: 7-8 cm 0.8-1 cm 256 qt 33 qt To4: 9-10 cm 1-2 cm 238 qt 31.5 qt	To1:Gross return: 1,56,000 Net return: 1,06,000 B:C ratio: 3.12 To 2:Gross return: 1,86,000 Net return: 1,36,000 B:C ratio: 3.72 To3:Gross return: 2,10,000 Net return: 1,60,000 B:C ratio: 4.2 To4:Gross return: 1,96,000 Net return: 1,96,000 Net return: 1,46,000 B:C ratio: 3.92	Farmers express the higher income adoption of To3 (Arka haritha) has found to be good market prices and high yield		

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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)		Green chilli:185 Dry chilli: 24.5	Qt/ha	1,06,000	3.12
Technology option 2	IIHR, Bangalore	Green chilli:220 Dry chilli: 28.5	Qt/ha	1,36,000	3.72
Technology option 3	IIHR, Bangalore	Green chilli:256 Dry chilli: 33	Qt/ha	1,60,000	4.2
Technology option 4	IIHR, Bangalore	Green chilli:238	Qt/ha	1,46,000	3.92

	Dry chilli: 31.5			
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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: Performance assessment of chilli hybrid Arka Swetha, Arka Haritha and Arka Meghana
- 2 Problem Definition: Vegetable production is becoming profitable day by day. Poor quality & pest incidence, results in stagnant yield. Control of pest & diseases is becoming costly due to decreasing resistance in plants. In chilli, pests like aphids, thrips, mites and powdery mildew & viral diseases are more severe leading to problems like development of disease complex called murda complex and other problems
- 3 Details of technologies selected for assessment :

Technology Option 1: Farmer's Practice(Private varieties/hybrids), not using imidocloprid & neem cake

Technology Option 2: *Arka meghana, with Nursery spray of imidacloprid @ of 0.3 ml/lt, root dipping in imidacloprid @ 0.3 ml/lt, *Application of neem cake @ 250kg/ha

Technology Option 3: *Arka Harita with Nursery spray of imidacloprid @ 0.3 ml/lt Root dipping in imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha **Technology Option 4:** Arka swetha with Nursery spray of imidacloprid @ of 0.3 ml/lt ,root dipping in imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha

- 4 Source of technology: IIHR, Bangalore
- 5 Production system and thematic area: Irrigated, Yield maximization and pest and disease management
- 6 Performance of the Technology with performance indicators:

To1: Green chilli:185 Qt/ha Dry chilli: 24.5 Qt/ha To2: Green chilli:220 Qt/ha

Dry chilli: 28.5 Qt/ha

To3: Green chilli:256 Qt/ha

Dry chilli: 33 Qt/ha To4: Green chilli:238 Qt/ha Dry chilli: 31.5 Qt/ha

- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :
- 8 Final recommendation for micro level situation: Arka haritha has found good market prices, higher yield and more income, scarcity of labour during transplanting tage, flower drops
- 9 Constraints identified and feedback for research: Non availability of seeds at local market, seed cost is more
- 10 Process of farmers participation and their reaction: good

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	lower productivity per unit area, Lack of knowledge in land, water and fertilizer use efficiency	Higher productivity in banana through high density planting	4	To1: 1.8m x 1.8m spacing (3000 pl/ha) To2: 2.1m x 2.1 m spacing (2268 pl/ha) To3: Paired row planting with zig zag method (2 m x 1.2m x 1.2m)	Size of fruit, Bunch wt, No. fruits/bunch., Yield/ha					

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's					
practice)					
Technology option 2	UAS, Dharwad	Ongoing			
Technology option 3	National Research centre for banana, Tiruchirapalya, Tamil nadu				

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: Higher productivity in banana through high density planting
- 2 **Problem Definition:** lower productivity per unit area, Lack of knowledge in land, water and fertilizer use efficiency
- 3 Details of technologies selected for assessment:

To1: 1.8m x 1.8m spacing (3000 pl/ha) **To2:** 2.1m x 2.1 m spacing (2268 pl/ha)

To3: Paired row planting with zig zag method (2 m x 1.2m x 1.2m)

- 4 Source of technology: To2: UAS, Dharwad, To3:National Research centre for banana, Tiruchirapalli, Tamil nadu
- **Production system and thematic area:** Irrigated, High density of banana planting has been standardized for increasing the land, water and fertilizer use efficiency and to obtain maximum profitability. Labour and cost saving technology
- 6 Performance of the Technology with performance indicators: Ongoing
- 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

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
Coconut	Rainfed	Higher incident of eriophid mite and improper control measure	Integrated management of eriophid mite in coconut	5	Technology option 1 (Farmer's practice) : Applying complex fertilizer 200gm/palm, 10kgFYM/palm Technology option 2:50kg FYM, 500:320:1200gm NPK/plant/year 5kg neem cake/palm/year 50gm borax/palm/year 500gm MgSo ₄ /palm/year Eco neem 1% 10ml/palm, 3 times/year Technology option 3:50kg FYM, 500:320:1200gm NPK/plant/year 5kg neem cake/palm/year 50ggm borax/palm/year Technology option 3:50kg FYM, 500:320:1200gm NPK/plant/year 5kg neem cake/palm, coconut tonic(200ml/palm) twice a year,6 month interval+ 50gm borax/palm/year +500gm MgSo ₄ /palm/year	1.% of mite incidence 2.No. of nut/Plant 3.B:C ratio	TO1 1) 70% 2)improved 36nuts/palm/year TO2 1) 35-40% 2)improved 40nuts/palm/year TO3 1) 20-25% 2)improved 44nuts/palm/year	Reduction in mite incidence was noticed in technology option 3 Ongoing Project			

Cont..

Coconut	Source of technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
Technology option 1					
(Farmer's practice)					
Technology option 2	UAS				
recimology option 2	Bangalore				
	TNAU,				
Technology option 3	Coimbatore				

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

- 1 **Title of Technology Assessed:** Integrated management of eriophid mite in coconut
- **Problem Definition:** Higher incidence of eriophyd mite due to lack of resistance in palms and improper control measures results in vield reduction & income loss
- 3 Details of technologies selected for assessment:
 - **Technology option 1** (Farmer's practice): Applying complex fertilizer 200gm/palm, 10kgFYM/palm
 - **Technology option 2 :** 50FYM, 500:320:1200gm NPK/plant/year. 5kg neem cake/palm/year 50gm borax/palm/year , 500gm MgSo₄ /palm/year Eco neem 1% 10ml/palm, 3 times/year
 - **Technology option 3 :** 50FYM, 500:320:1200gm NPK/plant/year , 5kg neem, cake/palm, coconut tonic(200ml/palm) twice a year,6 month interval+ 50gm borax/palm/year+500gm MgSo₄/palm/year
- 4 Source of technology: To2: UAS Bangalore To3: TNAU, Coimbatore
- 5 Production system and thematic area: Irrigated /Rainfed, Integrated Nutrient Management
- 6 Performance of the Technology with performance indicators: On going
- 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

Sl. No.	Category	Farming Situation	Season and Year	during 2011- Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area	(ha)	No de	rs/ on	Reasons for shortfall in achievement	
1,0,			1001					2 omonguratea	Proposed	Actual	SC/ST	Others	Total	welle vellene
1	Oilseeds	Rainfed	Kharif 2011-12	Castor		DCH- 177	Productivity enhancement of Castor through Integrated crop management	-Variety: DCH-177 -Recommended Dose of Fertilizer: 38: 38: 25 NPK kg/ha (Based on STCR) -PSB-50gm/kg of seed -Trichoderma 10gm/kg of seed -FYM: 5 ton/ha -Use of bird perches -Use of Methyl parathion 1ml/lit	4	4	2	11	13	
2		Rainfed	Kharif 2011-12	Groundnut	Chintamani-2		Productivity enhancement of groundnut through INM	- Recommended Dose of Fertilizer: 25: 50: 25 NPK kg/ha (Based on STCR) -FYM: 7.5 ton/ha -Seed treatment with Trichoderma @4gm/kg and rhizobium @375gm/ha -Soil drenching with chloropyriphos @ 1.5 lit/ha -Intercropping with Redgram (4:1) -Gypsum application @ 500 kg/ha	5	5	3	7	10	
	Pulses							Ŭ						
3		Rainfed	Kharif 2011-12	Redgram	BRG-1		Harnessing Redgram productivity	-Variety: BRG-1 -Recommended Dose of Fertilizer: 25: 50: 25 NPK kg/ha (Based on STCR) -IPM measures: Cultural: Deep ploughing to expose immature stages of pests Use of pheromone traps Biological: NPV@ 250 LE/ha Chemical:Indaxicarb @0.5ml/lt	25	25	9	23	32	

4		Rainfed	Kharif 2011-12	Greengram	S-4	-	Yield maximization in greengram through ICM	Variety: S-4 -Recommended Dose of Fertilizer:	5	5	3	9	12	
								13:25:25 NPK kg/ha (STCR) -Seed treatment with Rhizobium @ 375 gm/ha -Dimethoate: 1.7ml/lt						
5		Rainfed	Rabi 2011- 12	Bengalgram	JG-11		ICM	-Introduction of JG -11 -Use of Trichoderma -Plant Protecton measures(Indaxicarb)	5	5	1	3	4	
6	Special pulse programme	Rainfed	Rabi 2011- 12	Bengalgram	JG-11		ICM	-Introduction of JG -11 -Use of Trichoderma -Plant Protecton measures(Indaxicarb)	27	27	7	20	27	
	Cereals													
7		Irrigated	Kharif 2011-12	Paddy	BR- 2655	-	-Blast management	-Popularization of BR – 2655 -Nutrient & disease management	7	7	4	14	18	
8		Irrigated	Kharif 2011-12	Paddy	Tanu	-	Yield maximization	-Popularization of Tanu -Seed treatment with Carbendazim and Bio-fertilizers -Nutrient management	5	5	3	15	18	
	Millets													
9		Rainfed	Kharif 2011-12	Ragi	KMR-301		-Production technology	Popularization of KMR-301 for high yielding and blast tolerance	5	5	2	11	13	
10		Rainfed	Kharif 2011-12	Ragi	ML- 365	-	-Production technology	Popularization of ML-365 for high yielding and blast tolerance	10	10	3	14	17	
11		Rainfed	Kharif 2011-12	Ragi	GPU- 66	-	-Production technology	Recommended dose of fertilizer 50: 40:25 NPK kg/ha -FYM-7.5 t/ha -Azospirillium@ 2 kg/ha -PSB @ 2 kg /h	10	10	4	14	18	
12		Rainfed	Kharif 2011-12	Ragi	GPU- 48	-	-Productivity enhancement in green gram – Ragi based cropping system	-Popularization of GPU 48 for late sowing and blast incidence -Intercroping with redgram (8 : 2) -Nutrient management	1	1	0	2	2	
13		Rainfed	Kharif 2011-12	Little millet	OLM- 203	-	Production technologies	-Introduction of OLM-203	5	5	1	4	5	

	Vegetables												
14		Irrigated	Kharif 2011-12	Chilli	Arka Suphal		Yield maximization	Improved Chilly variety Arka Suphal	1.5	1.5	2	7	9
15		Irrigated	Kharif 2011-12	Tomato		Arka Ananya	ICM	-Using Arka Ananya, marigold seeds -Tricoderma viridae 2kg Neem cake soil application -Imidoclophrid -Neem Soap	1.5	1.5	2	4	6
16		Irrigated	Rabi 2011-12	Brinjal		Arka Anand	ICM and Pest management	-Introduction of Arka Anand -Root dipping in Trichoderma harzianum 20gm/lt -Using neem cake 250kg/ha	1	1	1	4	5
	Fruit												
17		Irrigated	Kharif 2011-12	Banana	Puttbale		Banana special	Foliar application of Banana special for higher yield 5gm/lt - 4 sprays 5 th . 6 th , 7 th and 8 th month after planting and last spray on floral part and bunch	1	1	2	3	5
	Plantation												
18		Rain fed with protected irrigation	Kharif 2011-12	Arecanut	Local		INM	INM MOP 230 m/pl Borax 25 gm/pl	1.5	1.5	1	4	5
19		Rain fed with protected irrigation	Kharif 2011-12	Coconut	Local		IPM	Root feeding of 2% Tridomorph @ 100ml/plant -Application of Trichoderma -Application of neem cake -Digging isolation trenches Demonstration of use of traps - Demonstration of application of carbaryl	100	100	2	3	5

20	Poultry	Kharif 2011-12	Birds	Swarna dhara	Backyard rearing of swarndhara layer birds	300 birds	300 birds	4	11	15	
21	Sheep and goat	Kharif 2011-12	Sheep	bannur ram	Up gradation of local sheep using Bannur ram.	2un its	2units	0	2	2	
22		Kharif 2011-12	Goat	Jamunap ari	Up gradation of local goats using Jamunapuri buck	2un its	2units	0	2	2	
23	Fodder				Demonstration of fodder varieties	3	3	3	11	14	
24	Azolla				Cultivation of Azolla Fertilizer application -SSP-10gm +MOP-10gm +100gm dung for apit size of 3x2 meter+400gm azolla	4 unit	4 unit	1	3	4	

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

Sl. No.	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and		Status of	soil	Previous crop grown
NO.			Year		-				year	N	P	K	
	Oilseeds												
1		Rainfed	Kharif 2011-12	Castor		DCH- 177	Productivity enhancement of Castor through Integrated crop management	-Variety: DCH-177 -Recommended Dose of Fertilizer: 38: 38: 25 NPK kg/ha (Based on STCR) -PSB-50gm/kg of seed -Trichoderma 10gm/kg of seed -FYM: 5 ton/ha -Use of bird perches -Use of Methyl parathion 1ml/lit	Kharif 2011-12	M	L-M	М-Н	Ragi, Redgram
2		Rainfed	Kharif 2011-12	Groundnut	Chintamani-2		Productivity enhancement of groundnut through INM	- Recommended Dose of Fertilizer: 25: 50: 25 NPK kg/ha (Based on STCR) -FYM: 7.5 ton/ha -Seed treatment with Trichoderma @4gm/kg and rhizobium @375gm/ha -Soil drenching with chloropyriphos @ 1.5 lit/ha -Intercropping with Redgram (4:1) -Gypsum application @ 500 kg/ha	Kharif 2011-12	L	M	Н	Ragi, Cowpea
	Pulses							500 Ng Ma					
3		Rainfed	Kharif 2011-12	Redgram	BRG-1		Harnessing productivity in Redgram	-Variety: BRG-1 -Recommended Dose of Fertilizer: 25: 50: 25 NPK kg/ha (Based on STCR) -IPM measures: Cultural: Deep ploughing to expose immature stages of pests Use of pheromone traps Biological: NPV@ 250 LE/ha Chemical:Indaxicarb @0.5ml/lt	Kharif 2011-12	L	L- M	M- H	Castor, Redgram, Ragi, Groundnut
4		Rainfed	Kharif 2011-12	Greengram	S-4	-	Yield maximization in greengram through ICM	Variety: S-4 -Recommended Dose of Fertilizer: 13:25:25 NPK kg/ha (STCR) -Seed treatment with Rhizobium @ 375 gm/ha -Dimethoate: 1.7ml/lt	Kharif 2011- 12	L	L- M	M- H	Redgram, Ragi,

						,							
5		Rainfed	Rabi 2011-12	Bengalgram	JG-11		ICM	-Use of Trichoderma -Plant Protecton measures(Indaxicarb)	Rainfed				
6		Rainfed	Rabi 2011-12	Bengalgram	JG-11		ICM	-Use of Trichoderma -Plant Protecton measures(Indaxicarb)	Rainfed				
	Cereals												
7		Irrigated	Kharif 2011-12	Paddy	BR - 2655	-	Blast management	-Popularization of BR – 2655 -Nutrient management	Kharif 2011-12	M	L - M	M	Greengram
8		Irrigated	Kharif 2011-12	Paddy	Tanu	-	Yield maximization	-Popularization of Tanu -Seed treatment with Carbendazim and Bio-fertilizers -Nutrient management	Kharif 2011-12	L	L - M	Н	Paddy
	Millets												
9		Rainfed	Kharif 2011-12	Ragi	KMR-301	-	Production Technology	Popularization of KMR-301 for high yielding and blast tolerance	Kharif 2011-12	L - M	M	Н	Ragi, Redgram, Castor
10		Rainfed	Kharif 2011-12	Ragi	ML-365	-	Production Technology	Popularization of ML-365 for high yielding and blast tolerance	Kharif 2011-12	L	M	М-Н	Ragi, Redgram, Castor, Sesamum
11		Rainfed	Kharif 2011-12	Ragi	GPU -48	-	Productivity enhancement in green gram – Ragi based cropping system	-Popularization of GPU-48 for late sowing and blast incidence -Intercroping with redgram (8 : 2) -Nutrient management	Kharif 2011-12	L	М	М-Н	Greengram
12		Rainfed	Kharif 2011-12	Ragi	GPU-66	-	-Production technology	Recommended dose of fertilizer 50: 40:25 NPK kg/ha -FYM-7.5 t/ha -Azospirillium@ 2 kg/ha -PSB @ 2 kg /h	Kharif 2011-12	L	М	М-Н	Redgram, Castor,
13		Rainfed	Kharif 2011-12	Little millet	OLM-203	-	Production technologies	-Introduction of OLM- 203 -Nutrient management	Kharif 2011-12	L	L	M	Ragi, Same, Horsegram Sesamum
	Vegetables												
14		Irrigated	Kharif 2011- 12	Chilli	Arka Suphal	•	Yield maximization	Improved Chilly variety Arka Suphal	Kharif 2011-12	M	M	M	Ragi, Cowpea fodder
15		Irrigated	Kharif 2011-12	Tomato		Arka Ananya	ICM	-Using Arka Ananya, marigold seeds -Tricoderma viridae 2kg Neem cake soil application -Imidoclophrid	Kharif 2011-12	M	M	М	Ragi, Redram

								-Neem Soap					
16		Irrigated	Rabi 2011-12	Brinjal		Arka Anand	ICM and Pest management	-Introduction of Arka Anand -Root dipping in Trichoderma harzianum 20gm/lt -Using neem cake 250kg/ha	Rabi 2011-12	M	L	M	Vegetable, beans
	Fruit												
17		Irrigated	Kharif 2011	Banana	Puttbale		INM	Foliar application of Banana special for higher yield 5gm/lt - 4 sprays 5th. 6th, 7th and 8th month after planting and last spray on floral part and bunch	Kharif 2011	M	L	L	Ragi, Cowpea fodder crops.
18	Plantation	Rain fed with protected irrigation	Kharif 2011- 12	Arecanut	Local			INM MOP 230 m/pl Borax 25 gm/pl	Kharif 2011-12	M	L	L	Banana, Cow pea, fodder crops.

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology	Variety	Hybrid	Farming situation	No. of	Demo (ba)			(q/ha)		%	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
Сгор	demonstrated	variety	Hybrid		Demo.	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							Н	L	A										
Oilseeds																			
Castor	Productivity enhancement of Castor through Integrated crop		DCH- 177	Rainfed	13	4	14.5	8.5	10.50	9.0	16.6	12500	31500	19000	2.52	10500	27500	16500	2.61
	management																		
Groundnut	Productivity enhancement of groundnut through INM	Chintamani- 2		Rainfed	10	5	16.5	10.0	11.0	10.5	20.0	14000	33000	19000	2.35	14000	31500	17500	2.25
Pulses																			
Redgram	Harnessing Redgram productivity	BRG-1		Rainfed	26	10	14.75	10.25	11.5	10.0	15.0	11000	34000	23500	3.09	11000	30000	19000	2.72
Greengram	Yield maximization in greengram through ICM	S-4		Rainfed	12	5	14.2	9.0	9.50	8.1	17.28	10000	38000	37000	3.80	10000	32400	22400	2.72
Bengalgram	Integrated crop management in Bengalgram	JG-11		Rainfed	5	5	14.5	10.5	12.5	10.5	19.0	12000	37500	25500	3.12	12000	31500	19500	2.62
Bengalgram	Integrated crop management in Bengalgram	JG-11		Rainfed	27	27	14	9.5	12.1	10.2	18.6	12000	36300	24300	3.02	12000	30600	18600	2.55
redgram	Management of bruchids in pulses			Storage	10	10					Ţ	Jnder prog	ress						
Cereals																			
Paddy	-Blast management	BR-2655		Rainfed	18	7	67.50	60.00	61.00	50.50	15.30	20000	67100	47100	3.35	20000	55550	35550	2.75
Paddy	Yield maximization	Tanu		Rainfed	19	5	63.75	59.50	59.30	58.50	15.82	20,000	65230	45230	3.26	20000	56320	36320	2.81
Millets																			
Ragi	-Production technology	KMR-301		Rainfed	13	5	20.25	17.70	25.0	21.5	16.27	10000	22500	12500	2.25	10000	19350	9350	1.93
Ragi	-Production technology	ML-365		Rainfed	17	10	20.50	17.20	21.5	19.5	10.25	10,000	19350	9350	1.93	10000	17550	17550	1.75
Ragi	-Production technology	GPU-66		Rainfed	18	10			23.0	20.3	13.3	10000	20700	10700	2.07	10000	18270	8270	1.82

Ragi	-Productivity enhancement	GPU-48		Rainfed															
	in green gram – Ragi based				2	1	17.10	15.35	23.5	19.50	20.51	10000	21150	11150	2.11	10000	17750	7550	1.77
	cropping system																		
Same	Production technologies	OLM- 203		Rainfed	5	5	13.50	9.5	13.5	10.5	7.0	9000	24300	15300	2.7	9000	18900	8900	2.1
Vegetables																			
Chilli	Production technology	Arka Suphal		Irrigated	9	1.5	210	130	165	138	19.66	45,000	1,65,000	1,15,000	3.67	42,000	1,38,000	96,000	3.29
Tomato	ICM		Arka Ananya	Irrigated	6	1.5	480	295	385	330	16.66	56,000	2,40,000	1,84,000	4.29	50,000	1,65,000	1,15,000	3.30
Brinjal	ICM and Pest management		Arka Anand	Irrigated	5	1.0	328	220					Uı	nder progres	S				
Fruit																			
Banana	INM	Puttbale		Irrigated	5	1.0		•	•				Under prog	ress					•
Plantation																			
Arecanut	INM	Local		Irrigated	5	1.5	21.5	13.0	16.5	14.25	13.8	48,000	1,81,500	1,33,500	3.78	48,000	1,59,500	1,11,500	3.32
Coconut	IPM	Local		Rainfed with protective	5	100 palms													
Cocollut				Irrigated															

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

of the distribution of the state of the stat									
Data on other parameters in relation to technology demonstrated									
Parameter with unit	Demo	Check							
Tomato- leaf carle and bacterial wilt fruit borer	Reduced incidence	More incidence							
Brinjal-Bacterial wilt fruit and shoot borer	Reduced incidence	More incidence							
Chilli- Murda comples	Reduced incidence	More infection							
Banana-Size of fruit quality	Good quality	Medium quality							
Arecanut/ Button drops	Reduced nut drops	More drops							

5.B.2. Livestock and related enterprises

Type of	Name of the technology demonstrated	Breed	No. of	of .		Yi	eld (q/l	a)	%	*Ec		f demonstrat /unit)	ion			cs of check /unit)	
livestock	Name of the technology demonstrated	breeu	Demo	Units		Demo		Check if any	Increase	Increase Gross Gross Net ** Cost Return Return BCR				Gross Cost	Gross Return	Net Return	** BCR
					Н	L	Α										
Dairy	Azolla cultivation for dairy cows	HF Jersey	4	4						600 1500 900 2.5							
Poultry	Backyard rearing of swarnadhara layer birds		15	20 birds	160	100	130	60-70	2-3 times	1400	1400 6100 4700 4.35 900				3000	2100	3.3
Sheep	Up gradation of local goats using Jamunapari buck	Jamunapari buck	2	2							U	nder progress					
Goat	Up gradation of local sheep using Bannur ram	Bannur ram	4	4						Under progress							
Fodder	Cultivation of COFS 29 fodder variety	COFS 29	25	25	800	400	560	300	86	10000 52000 42000 5.2 420				4200	10400	6200	2.4
Others	Rubber mat for cows	HF	2	2						Under progress							

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	n to technology demonstrated
Parameter with unit	Demo	Check if any
Fodder yield(COFS-29)	30% more yield compared to traditional varieties grown by farmers	
Milk Yield (Azollz cultivation)	10% increase in milk yield and maintenance of normal SNF and fat	

5.B.3. Fisheries: NIL

5.B.4. Other enterprises :**NIL**

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									
Ragi	Finger and neck Blast incidence: Low	-High									
Paddy	Stem borer and Blast– very Low Aerobic Paddy : Weed incidence – Very Low	Stem borer and Blast – High Aerobic Paddy : Weed incidence (High)									
Tomato	Fruit borer and Wilt - very Low	Fruit borer and Wilt - High									
Chilli	Murda complex-very low	high									

5.B.5. Farm implements and machinery: **NIL**

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

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	05	331	
2	Farmers Training	32	1218	
3	Media coverage	05	05	
4	Training for extension functionaries	5	185	
5	Others (Please specify)			

<u>PART VI – DEMONSTRATIONS ON CROP HYBRIDS</u>

Demonstration details on crop hybrids

Type of	N	Name of the	No. of	Area	Area Yield (q/ha)		na) % Increase		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)				
Breed	Name of the technology demonstrated	hybrid	Demo	(ha)		Demo		Check	% increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oilseeds																	
Castor	Productivity enhancement of Castor through Integrated crop management	DCH-177	13	4	14.5	8.5	10.50	9.0	16.6	12500	31500	19000	2.52	10500	27500	16500	2.61
Tomato	ICM	Arka Ananya	6	1.5	480	295	385	330	16.66	56,000	2,40,000	1,84,000	4.29	50,000	1,65,000	1,15,000	3.30
Brinjal	ICM and Pest management	Arka Anand	5	1.0	328	220			Und	er progre	SS						

VII. TRAINING

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

Area of training	No. of				N	o. of Partic	ipants			
Area of training	Courses		General			SC/ST			Grand Total	
Crop Production		Male	Female	Total	Male	Female	Total	Male	Female	Total
			10							
Resource Conservation Technologies	14	44	18	62	26	12	38	70	30	100
Cropping Systems	1	14	-	14	08	-	08	22	-	22
Crop Diversification										
Integrated Farming	02	79	-	79	19	-	19	98	-	98
Micro Irrigation/Irrigation										
Seed production	03-	174	06	180	32	-	32	206	06	212
Nursery management										
Integrated Crop Management	04	72	03	75	24	-	24	96	03	99
Soil and Water Conservation	11	352	-	352	98	-	98	450	-	450
Integrated Nutrient Management	01	31	-	31	05	-	05	36	-	36
Horticulture										
a) Vegetable Crops										
Production of low value	01	13	12	25	02	04	06	15	16	3:
and high volume crop Nursery raising	01	21	_	21	06	-	06	27	_	27
b) Fruits										
Cultivation of Fruit	01	17	_	17	07	_	07	24	_	24
d) Plantation crops	01	17		17	07	_		24	_	
	0.2		00	7.4	17	0.2	10	0.2	10	0/
Production and Management technology	02	66	08	74	17	02	19	83	10	93
Soil Health and Fertility										
Management										
Soil fertility management	02	14	-	14	40	-	40	54	-	54
Integrated nutrient management	02	38	-	38	08	-	08	46	-	40
Livestock Production and										
Management										
Dairy Management	01	61	07	68	22	-	22	83	07	90
Home Science/Women empowerment										
Value addition	01	-	188	188	-	66	66	-	254	254
Women and child care	01	19	18	37	05	07	12	24	25	49
Capacity Building and										
Group Dynamics	0.4	F-4			40		10			
Entrepreneurial development of farmers/youths	01	51	-	51	18	-	18	69	-	69
TOTAL	49	1066	260	1326	337	91	428	1403	351	1754

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

	No. of				No.	of Partici	pants			
Area of training	Courses	Mala	General	TD : 4 : 1	34.1.	SC/ST	T . 4 . 1	Mala	Grand Total	TD - 4 - 1
Crop Production		Male	Female	Total	Male	Female	Total	Male	Female	Total
Resource Conservation	03	95	03	98	24	-	24	119	03	122
Technologies Integrated Farming	03	97	04	101	13	02	15	110	06	116
	03	91	04	101	13	02	13	110	00	110
Micro Irrigation/Irrigation										
Seed production	01	28	05	33	12	-	12	40	05	45
Nursery management										
Integrated Crop Management	04	77	02	79	21	-	21	98	02	100
Soil and Water Conservation										
Integrated Nutrient Management	01	26	-	26	02	-	02	28	-	28
Horticulture										
a) Vegetable Crops										
Production of low value and high	02	28	46	74	04	14	18	32	60	92
volume crop b) Fruits										
Cultivation of Fruit	04	105	05	110	28	01	29	133	06	139
c) Ornamental Plants	04	103	03	110	20	01		133	00	137
,	0.1		47	47		00	00			
Nursery Management	01	-	47	47	-	08	08	-	55	55
d) Plantation crops										
Production and Management technology	03	52	20	72	12	06	18	64	26	90
Processing and value addition	03	107	62	169	18	28	46	125	90	215
Soil Health and Fertility										
Management Soil fertility management	01	52	-	52	12	-	12	64	-	64
Integrated water management										
Integrated nutrient management	01	47	07	54	14	_	14	61	07	68
Livestock Production and				_						
Management	02	24	2.4	50	0.6	12	10	20	46	7.0
Dairy Management	02	24	34	58	06	12	18	30	46	76
Poultry Management	01	15	03	18	02	-	02	17	03	20
Animal Nutrition Management	01	08	29	37	-	04	04	08	33	41
Animal Disease Management										
Feed and Fodder technology	03	31	48	79	06	15	21	37	63	100
Home Science/Women										
empowerment Household food security by kitchen	03	186	18	204	38	02	40	224	20	244
gardening and nutrition gardening Design and development of	01	_	23	23	-	04	04	_	27	27
low/minimum cost diet										
Designing and development for high nutrient efficiency diet	01	-	92	92	1	71	71		163	163
Minimization of nutrient loss in processing	01	35	12	47	07	-	07	42	12	54
Processing and cooking	01	-	125	125	-	39	39	-	164	164
Gender mainstreaming through	01	-	42	42	-	08	08	-	50	50
SHGs Value addition	04	140	08	148	31	-	31	171	08	179
Women empowerment	01	47	-	47	08	_	08	55	-	55
women empowerment	01	4/	-	47	08	_	08	33	_	33

Women and child care	01	-	48	48	-	12	12	-	60	60
Agril. Engineering										
Post Harvest Technology	02	78	17	95	11	04	16	89	21	100
Plant Protection										
Integrated Pest Management	12	327	61	388	56	22	78	383	83	466
Integrated Disease Management	07	230	30	260	110	09	119	340	39	379
Bio-control of pests and diseases	01	24	-	24	-	-	-	24	-	24
Production of bio control agents and bio pesticides	01	14	ı	14	06	-	06	20	-	20
TOTAL	71	1873	791	2664	441	261	702	2313	1052	3365

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

A 64	No. of									
Area of training	Courses	General SC/ST Grand Total							al	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	03	108	I	108	42	ı	42	150	-	150
TOTAL	03	108	-	108	42	-	42	150	-	150

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

	No. of				No. of I	Participant	is			
Area of training	Courses		General			Grand Total				
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	49	-	49	24	-	24	73	-	73
Value addition	03	41	06	47	14	02	16	55	08	63
Dairying	01	01	22	23	-	09	09	01	31	32
TOTAL	05	91	28	119	38	11	49	129	39	168

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

	No. of				No. o	f Participa	ints			
Area of training	Courses	(General			SC/ST			Grand Tot	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	01	18	08	26	08	04	12	26	12	38
Integrated Pest Management	01	111	05	116	59	-	59	170	05	175
Women and Child care	01	-	38	38	-	24	24	1	62	62
Low cost and nutrient efficient diet designing	03	128	09	137	42	06	48	170	15	185
Total	06	257	60	317	109	34	143	366	94	460

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

A 64	No. of				No. of	Participa	nts			
Area of training	Courses	(General			SC/ST			Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Low cost and nutrient efficient diet	01	27	14	41	11	08	19	38	22	60
designing										
Total	01	27	14	41	11	08	19	38	22	60

7.G. Sponsored training programmes conducted

G.N.	A 64	No. of Courses				No.	of Particip	ants			
S.No.	Area of training		General SC/ST Grand Total							ıl	
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Soil health and fertility management	13	341	-	341	163	-	163	504	-	504
2	Water resource conservation technology	02	39	21	60	31	09	40	70	30	100
3	Integrated nutrient management	01	29	-	29	17	-	17	46	-	46
	Total	15	409	21	430	211	09	220	620	30	650

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

<u>PART VIII – EXTENSION ACTIVITIES</u>

Extension Programmes (including extension activities undertaken in FLD programmes)

					No. of Participants			**		•
Nature of Extension	No. of	No. of Par	ticipants (G	eneral)	No.	of Particip SC/ST	oants	N	o. of exten	
Programme	Programmes	26.1		T	363			36.1	personne	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	07	189	93	282	64	41	105	12		12
Exhibition	05	4605	2240	6845	2265	1755	4020	180	30	210
Film Show	11	88	81	169	48	36	84	36	17	53
Method	27	107	83	190	64	43	107	10		10
Demonstrations										
Group meetings	36	157	103	260	79	38	117	21		21
Lectures delivered as	55	792	515	1307	368	250	618	160	65	225
resource persons										
Newspaper coverage	24									
Radio talks										
TV talks	5									
Popular articles	2									
Extension Literature	4									
Advisory Services										
Scientific visit to	20	226	147	373	190	68	258			
farmers field										
Farmers visit to KVK		215	185	400	160	86	246			
Diagnostic visits	08	26	17	43	17	12	29	13		13
Exposure visits	03	196	-	196	64	-	64			
National Nutrition	02	32	133	165	19	111	130	4		4
week										
Parthnium Awareness	01	23	16	39	12	08	20			
week										
World food day	01	104	08	112	52	-	52	5	2	7
International womens	01	67	05	72	32	02	34	9	5	14
day										
Any Other (Specify)										
Total	212	6827	3626	10453	3424	2450	5874	450	119	569

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 (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Paddy	Aerobic		0.8	800	1
	Ragi	MR-6		75.90	100800	
	Ragi	HR-911		10.30		
	Ragi	ML-365		13.00		
	Ragi	GPU-67		3.70		
	Same	OLM-203		21.00	31500	
Pulses	Redgram		BRG-1	39.97	179865	
Others (specify)	Same straw	OLM-203		2 load	5000	2
	Ragi straw			13 load	32500	8
	Redgram husk	BRG-1		1 load	2500	2
Total				164.67	3,52,965	13

9.B. Production of planting materials by the KVKs

Horticulture Nursery Seedling Production (2011-12) under NHM project

Sl. no	Name of the seedling produced	Total quantity produced	Total quantity sold	Balance as on 30- 03-2012	Amount (Rs.)
1.	Chilli	66,175	66,175	000	25,118
2.	Tomato	14,200	14,200	000	
3.	Brinjal	8,500	8,500	000	
4.	Drum stick (Bhagya, PKM-1)	3,300	2,000	300	20,000
5.	Papaya (Surya)	3,500	3,000	500	30,000
6.	Arecanut (Hirehalli tall)	12,000	900	11,100	13,500
7.	Sapota (Cricket ball)	12,588	4,588	8,000	1,83,520
8	Mango	500	000	500	
	Total			20,400	2,72,138

Corporate Governance/Institution Building (report prepared/special assignments outside the organization/facilities/infrastructure created in the department/station/unit)

- ➤ Infrastructures developed in KVK Farm under NHM Project are
 - 1. Mother plant progeny
 - 2. Farm Pond
 - 3. Water tank
 - 4. Drip irrigation System to mother plant
 - 5. Vermicomposting unit
 - 6. Bore well
 - 7. Drainage system connected to Farm Pond
 - 8. NHM Board for Mother plant plot
 - 9.C. Production of Bio-Products: NIL
 - 9.D. Production of livestock materials: NIL

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

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

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Seasonal abundance and diversity of	H. Guruprasad and K.M.	
	spiders in mango ecosystem.	Srinivas Reddy, 2011.	
	Environment and Ecology 29 (4A):		
	2028-2034.		
	Efficacy of different insecticides against	P.N. Sreekanth and K.M.	
	sucking pests of cotton. Environment	Srinivas Reddy, 2011.	
	and Ecology 29 (4A) : 2035-2039.		
	Evaluation of new systemic and contact	T. Rudramuni, K.M. Srinivas	
	insecticides against insect pest complex	Reddy and C.T. Ashok Kumar,	
	of cotton. Crop Research 42 (1,2 &3):	2011.	
	296-302.	2011.	
	Evaluation of neem products against	T. Rudramuni, K.M. Srinivas	
	insect pests of cotton. <i>Crop Research</i> 42	Reddy and V.T.	
	(1,2 &3): 303-306.	Sannaveerappanavar, 2011.	
	Feeding potential and functional	11	
	response of spider, Argiope pulchella		
	Thorell: A potential predator of mango	Guruprasad, H. and Srinivas	
	ecosystem. Journal of Recent Trends in	Reddy , K.M. 2011.	
	Biosciences 1(2): 29-34.		
	Morphology and Biology of spider,		
	Argiope pulchella Thorell: A potential		
	predator of mango ecosystem. Journal	Guruprasad, H. and Srinivas	
	of Recent Trends in Biosciences 1(2):	Reddy , K.M. 2011.	
	29-34.		
	Distribution of soil invertebrates in		
	grassland and agro-ecosystems and their	IZ M. Cuinings Dodder and	
	relationship with climatic and edaphic	K.M. Srinivas Reddy and	
	factors. Journal of Soil Biology and	N.G. Kumar, 2010.	
	Ecology 30 (1&2): 139-144.		
	Abundance of soil fauna as influenced by		
	agro-chemicals in soybean ecosystem		
		K.M. Srinivas Reddy and	
	Journal of Soil Biology and Ecology 30	N.G. Kumar, 2010.	
	(1&2): 145-152.	,	
	Thotagarike belegalalli Basavana huluvina	Srinivas Reddy K.M,	1
	Samagra hathoti.	Shivalingaiah, Y.N, Prabhu	1
	Samagra nathoti.	Ganiger, Mamatha H.S	
	Susthira krushiyalli samagra peede	Srinivas Reddy K.M, Prabhu	1
	nirvahane		1
	mrvanane	Ganiger, Shivalingaiah, Y.N,	
	Vaishiyalii Irala gala asih	Mamatha H.S	1
	Krishiyalli kalegala samagra nirvahana	Srinivas Reddy K.M,	1
	kramagalu	Shivalingaiah, Y.N, Mamatha	
	Destruction of the state of the	H.S	1
	Beejopachara mathu roga nivrvaneyalli	Srinivas Reddy K.M,	1
	beejopacharada mahatva	Shivalingaiah, Y.N, Mamatha	
		H.S	
	Kirudanya belegala moulya mathu mahatva	Mamatha H.S, Srinivas Reddy	1
		K.M, Shivalingaiah, Y.N,	
	Empowerment of women in food sector	Rooparani M.S, Revanna M.L	1
		and Mamatha H.S	
	Socio economic status of women in food	Rooparani M.S, Revanna M.L	1
	enterprises	and Mamatha H.S	

	Soya avare protein olleya arogyakke maha	Mamatha H.S, M.S, Revanna,	1
	varadana	Rooparani M.S, Priyanka H.N	1
	Soya protein mathu hrudaya rogagala	Mamatha H.S, M.S, Revanna,	1
	nirodha	Rooparani M.S, Priyanka H.N	
	Poustika ahara hagoo arthika pragatige	Mamatha H.S, M.S, Revanna,	1
	anabe besaya	Rooparani M.S, Priyanka H.N	
	Ragi poustikate moulyavardita utpannagalu	Mamatha H.S, M.S, Revanna, Rooparani M.S, Priyanka H.N	1
	Formulation and estimation of glycarmic	Mamatha H.S and Shivaleela	1
	index of diabetic vermicelli from	H.B	
	fingermillet and medicinal plants		
	Sensory quality of finger millet based	Mamatha H.S and Shivaleela	1
	diabetic vermicelli products	H.B	
	Changes in cooking and sensory quality of	Mamatha H.S, Mushtari	1
	finger millet based diabetic vermicelli	begum, J. Shivaleela H.B	
	Personal and social psychological	Swetha B.S, N. Narasimha,	1
	characteristics of farmwomen beneficiaries	Shankara, M.H and sowmya	
	of farm demonstration	T.M	
	Farmers perception f of climate change and	Shankara, M.H, M.	1
	their adaptations in ragi production	Shivamurthi,	
Tachnical rements		Swetha B.S, and Harish, L	
Technical reports News letters			
Technical	Scaling up of water productivity	KVK, staff	100
bulletins	Scannig up of water productivity	KVK, staff	100
Popular articles	Bahuvashika mevina jola CoFs-29	Manjunath sugur and Nagappa desai	
	Shuddha halina utpadane	Manjunath sugur and Nagappa	
	The second secon	desai	
Extension			
literature			
	Pramukha Tharakari belegala keeta matthu	Srinivas Reddy K.M., K.B.	
	rogagala guruthisuvike haagu avufala	Palanna, Y.N. Shivalingaiah	
	samagra nirvahane.	matthu Pradeep Kumar C.	
		2011-12	
	Pramukha hannina belegala keeta matthu	Srinivas Reddy K.M., K.B.	
	rogagala guruthisuvike haagu avugala	Palanna, Y.N. Shivalingaiah	
	samagra nirvahane.	matthu Pradeep Kumar C.	
	Samagra ini vanane.	2011-12	
	Thengu matthu adike belegalalli samagra	Srinivas Reddy K.M., K.B.	
	peede nirvahane.	Palanna, Y.N. Shivalingaiah	
		matthu Pradeep Kumar C.	
		2011-12	
	Thotagaarika belegalalli basavanahuluvina	Srinivas Reddy K.M., K.B.	
	samagra hathoti kramagalu.	Palanna, Y.N. Shivalingaiah	
		matthu Pradeep Kumar C. 2011-12	
Training	Hannu matthu tharakaarigala samskarane	Mamatha, H.S. Y.N.	
Manuals	matthu samrakshane	Shivalingaiah and Srinivas	
	The sum and sum of the	Reddy K.M. 2011-12	
	Musukina Jola matthu Ragi	Mamatha, H.S. Y.N.	
	Moulyavardhitha Uthpannagalu	Shivalingaiah and Srinivas Reddy K.M. 2011-12	
	Jeevanopayakkagi Krishiyalli Neerina	Kumara, O., Srinivas Reddy,	
	Uthpadakathe Hecchisuva kurithu tharabethi	K.M., Nagappa Desai,	
	Thanthrika Kaipidi	Mamatha, H.S., Manjunath	
		Sugur and Shankara, M.H.	
		2012.	
TOTAL			
	ı	ı	ı

10.B. Details of Electronic Media Produced: NIL

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

Background:

Name of the farmwomen	:	Mahendra S/o Jnanamurthy Mathihalli, Tiptur (Tq) Tumkur Dt. Karnataka Ph. No:9945310841
Age (years)	:	27
Education (Highest level and subject)	:	PUC
Land holding	:	8 acres
Crops grown	:	Cereals, Horticulture crops, fodder crops
Livestock (Cow, buffalo etc in number)	:	40 cow,

Intervention

Process: Mr. Mahendra is an young progressive farmer have land holdings of 8 acres. He is involved in cultivation of different Agriculture and horticulture crops. He adopted improved dairy farming and growing fodder crops—such as B.H 18, CO 3 and MP chari in an area of 3 acres and ragi in an area of 3 acres.

Technology: Rearing high milk yielding 40 (HF and Jersy cows) and milking by using machine.

Impact

Horizontal Spread: He has adopted improved dairy farming. Nearly 500 farmers have visited his dairy shed and adopted the same technologies in their Dairy farming

Economic Gains: Daily he is getting nearly 300 lts of milk and fetching on an average Rs. 6,000 daily. Annually from crops and Dairy farming he is getting annual income of Rs. 3,00,000/-

Employment Generation: He is providing employment opportunities to 3-4 labours .

2. Title: Diversified Farming System

Background:

Name of the farmwomen	:	Pankaja w/o Mr. Chandra Shekar Siddanakatte, Ramanahalli (Pt) Kandikere Hobli Chikkanayakanahalli (Tq) Tumkur Dt. Karnataka 09986729926
Age (years)	:	48
Education (Highest level and subject)	:	SSLC
Land holding	:	25 acres
Crops grown	:	Cereals, Horticulture crops, medicinal plants.
Livestock (Cow, buffalo etc in number)	:	1 cow, 1 calf, 2 ducks, 2 turkey and backyard poultry

Intervention

Process: Mrs . Pankaja , a progressive farm women have land holdings of 25 acres. She is involved in cultivation of different horticulture crops such as arecanut, coconut, banana ; spices like pepper, turmeric etc, flower crops like jasmine, rose, crossandra etc.,and also grows some medicinal crops like aleovera, brahmi, lemon grass etc.,

Technology: With involvement of KVK Tumkur and the line departments she is growing improved varieties of Agricultural and horticultural crops and livestock. She is adopting improved agriculture technologies in plantation crops like arecanut and coconut. She owns plate and cup making machine, biodigester, brick making machine, arecanut dryer, arecanut bagging equipment, flour machine, coconut oil extractor.

Impact

Horizontal Spread: She has adopted Integrated Farming System along with use of farm machinery and Processing Equipments. Nearly 1000 farmers have visited her farm and adopted the same technologies in their farms **Economic Gains:** From all these activities she approximately earns 8-10 lakhs/annum.

Employment Generation: She is providing employment opportunities to 5-6 labours .

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

2. Title: Rat control in Plantation trees using local rat traps Background:

Name of the farmwomen	:	Mr. Arun Kumar, S. R Shettikere Chikkanayakanahalli (Tq) Tumkur Dt. Karnataka
Age (years)	:	35
Education (Highest level and subject)	:	B.Sc
Land holding	:	8 acres
Crops grown	;	Cereals, Horticulture crops.
Livestock (Cow, buffalo etc in number)	;	1 cow, 1 calf,

Intervention

Process: Mr. Arun kumar from Tumkur district Karnataka,, a young progressive farmer have land holdings of 8 acres. He is involved in cultivation of different Agriculture and horticulture crops such as arecanut, coconut, banana. Rats pose a major challenge to agriculture, especially after monsoon season. The rodents are major problem during crop growth in the field and during post harvest storage, as they consume and contaminate stored food. They also infect livestock feeds, kill poultry and consume their eggs.

Technology: The trap designed by Mr. Arun kumar is a binding wire which is tied to the four corners of an old bamboo basket and connected to a single plastic thread. The plastic thread is attached to a coconut front that can be pulled up for down. A snap trap is placed inside the bamboo basket and a chopped coconut kernel piece attached to it.

Impact

Horizontal Spread: It is low cost technology that promises to provide a good result. Grass root level technology and methodologies developed by Mr. Arun kumar benefits several farmers and has been accepted across the region. Nearly 3000 farmers were adopted this low cost technology throughout the state.

Economic Gains: On an average 1500 traps were sold @ Rs. 30 per trap. A single trap can catch upto 15-20 rats daily and 3000 -4000 nuts saved from damage from his 8 acres of land

Employment Generation: This technology can save the labour cost by manual control of rats.

Scientists – Farmer Interaction

The scientists of Krishi Vigyan Kendra, Tumkur Visited the farm of Mrs. Rekha, Bannihalli (Pt) Tiptur (Tq), Tumkur Dt, Karnataka and interacted (Face to Face interaction) regarding the Experience of Mrs. Rekha in Integrated Farming System and suggested the Problem solving strategies to overcome some difficulties in IFS. For past 5 years she is involved in Integrated Farming System for sustainable agriculture development. Before venture into IFS both husband and wife were employees of Govt. institute. They have passion for agriculture and started involving different activities in farm to get higher yield and income. She involves herself in IFS activities like growing of coconut, arecanut, banana, sapota, cardamom, clove, pepper, citrus species and forest trees like Jatropa, teak, etc in an area of 3.09 acres and also involving in dairy farming. In free time she engages herself in education / tuition up to 10th standard regarding general knowledge, and educated upto an extent of 500-700 farmers on IFS and ITK's. She is also involved in vermicomposting and practices rain water harvesting in house and in field implements water saving techniques such as drip and sprinkler irrigation.

Snails management in horticulture garden through participatory approach.

Snails are becoming serious pests of horticultural crops like Arecanut, coconut, banana, brinjal, tomato, chilies, jasmine, aster. This pest is causing economic damage to all these horticultural crops. Farmers locally control the pest using common. Salt and some of them use metaldehyde that is not available in right time and harmful to pest and children in the vicinity and also cost intensive.

Crop damage is severe especially in Hemavathi canal areas and poor adoption of the technology against the snails as it requires/demands group participation results in severe damage to horticulture crops

Refinement of Existing technologies.

Hence, it was proposed to refine the existing technologies.

Alternatives

In order to suitably refine the existing technologies, the following alternatives were formulated by the scientists themselves in consultation with other specialists.

- T1: Farmers not adopting any control measures
- T2: Farmers use metaldehyde for snail management
- T3: Slightly ripened papaya, Guava, banana, ricebran bait only. Technology is cost effective and organic farmers come foreward to use the technology option. Snails have to be collected manually and destroy.
- T4: Papaya/ Rice brain bait with 10 gms of methomyl in bait kills them.

Implementation of the programme

A training programme on snails management was organized at chikkanahalli Sira taluk and Mathihalli, Tiptur taluk to educate the farmers about management of snails.

In this training programme, KVK scientists stressed the importance of group approach and conducted the demonstration with all alternatives and explained about cost-benefit ratio of each technology

Farmers opinion

All the participants expressed their view about using metaldehyde, using slightly ripened fruits like papaya, banana and hand picking and using ripened fruits with methomyl(lante) as bait.

Farmers opined that using ripened fruits with hand picking is low cost and ecofriendly management practices(Rs. 500/ha) followed by using ripened fruits with methomyl (Rs 1600/ha) and metaldehyde chemicals (Rs 6800/ha)

Communication of the technology

The message that the low cost efficient and eco-friendly management technologies involving ripened fruits without baits and with baits can be effectively utilized for management of snails was communicated to the field level functionaries of the line departments using various channels such as the research extension interface, zonal workshop, training programme etc. About 85 farmers who adopted the technology during 2010-11 in an area of 220ha

 $10.E. \hspace{0.5cm} \textbf{Give details of indigenous technology practiced by the farmers in the KVK operational area} \\$

which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop /	ITK Practiced	Purpose of ITK
	Enterprise		_
1	Paddy/Ragi	Seedlings were transplanted equi distance at spacing of 22.5 x 22.5cm	It facilitates intercultivation in both directions, conserves moisture, controls weeds and enhance tillering
2	Ragi	Sowing seeds mixed with FYM	It ensures better moisture and nutrient supply and reduces seed rate and finally lesser cost of production
3	Sunflower	Seeds soaked in sour butter milk before sowing	It acts as a growth promoter
4	Coconut	Application of common salt	Cost effective substitute for potash and also acts as on insect repellent
		Planting cactus near tree	To control stem bleeding
5	Arecanut	Application of Tank silt @ 50ton/ha	Supply nutrient to crop
6	Paddy	Calotropies(yekka) branches are placed at the water inlet	Acts as a insect repellent
7	Coconut	Root feeding with neem oil	Reduce stem bleeding
8	Coconut	Planting kalli plants at the base of coconut palm	Reduce stem bleeding
9	Perennial crops	Rag husk, coconut fronds and husk are used as mulch	Check evaporation and weed growth
10	Redgram	Redgram is mixed with castor oil and stored in earthen vessel	Physical barrier to pests
11	Vegetable garden	Maize is grown around vegetable garden	Physical barrier to cattle and acts as a trap crop for insects

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

- Identification of courses for farmers/farm women
 - > PRA technique and need analysis through individual & group discussion
 - ➤ As per the suggestions of members of SAC
 - Based on discussion at Bimonthly workshop

- Rural Youth

- ➤ Survey & discussion
- Feedback from bankers
- In service personnel
- Discussion with District and taluk level officers to know the areas of interest/choice of extension workers based on field problems
- > Bimonthly meetings discussion
- > SAC interactions
- Diagnostic visits

10.G. Field activities

i. Number of villages adopted: 11ii. No. of farm families selected: 121iii. No. of survey/PRA conducted: 5

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

1. Year of establishment : 17-12-2005

2. List of equipments purchased with amount :

A) Under Non - recurring contingency

Sl. No.	Equipments / Instruments	Quantity (no.)	Cost (Rs.)
1	pH meter	1 each	8550.00
2	Conductivity bridge	1 each	7400.00
3	Physical Balance	1 each	12,000.00
4	Chemical Balance	1 each	48,900.00
5	Magnetic stirrer with Hot Plate	1 each	5500.00
6	Shaker with DC Motor	1 each	27,600.00
7	Hot Air Oven	1 each	20,000.00
8	Water Distillation Still	1 each	48,850.00
9	Spectrophotometer	1 each	46,200.00
10	Flame Photometer	1 each	38,720.00
11 12	Kjeldahl Digestion and Distillation Setup LG Refrigerator with Stabilizer and Stand	1 each 1 each	1,67,709.00 15,970.00
13	Kanchan Mixer Grinder	1 each	1800.00
13	TOTAL		s. 4,49,199.00
14. U	Under the laboratory setup: The following accessor		, , ,
a	Fume cupboard with shutter and blower	1	61,875.00
b	Laboratory tables: One table with Kadapa stone on top, size-10' x 3', One table with wooden top, size-8' x 3', One table with plywood top & compartments, size -8'x 3'	3	16,000.00
c	Showcase boxes	2	11,000.00
d	61/2' x 3' Steel almirahs with glass fitted doors	4	27,450.00
e	61/2' x 3' Steel almirahs without glass fitted doors	4	22,950.00
f	Office tables Size- 2 1/2' x 4 1/2'	1	3994.00
g	Office tables Size- 3' x 5'	1	4725.00
h	S - type chairs	5	3263.00
i	Steel rack	4	5848.00
j	Stools	5	1500.00
k	Exhaust fans	2	1688.00
l	Mesh work for laboratory rooms		1775.00
m	3-phase power connection to fume wood for running the motor (including labour charges)		3377.00
n	40 mm slab for the construction of platform for		4269.00

	placing the fume hood (including labour charges)		
0	Hotplate (rectangular type) - 12' x 18'	1	10,800.00
р	Painting materials & labour charges (for painting laboratory & office rooms & wooden almirahs & tables)		3976.00
q	Extension cords	3	2400.00
r	Aluminum partition for the Laboratory	1	10,000.00
	TOTAL	R	s. 1,96,890.00
	GRAND TOTAL (1 to 14)	R	s. 6,46,089.00

B. Under Recurring contingency:

Sl. No.	Particulars	Cost (Rs.)
1	Chemicals	44,695.00
2	Glassware	1,35,417.00
3	Petty Items: Gas connection for spectrophotometer with stove and other accessories (1+1), Subble, Pick axe, Mumties, Bondless, Lock Covers, 35 mm locks, Stationeries, Plastic items, Cloth Bags, etc. List of Soil sampling augers and other laboratory accessories purchased: Soil Sampling augers, Standard Test Sieves, Mortar and Pestle, Burette Stand with Clamp, Spatula, Wash Bottles, Agate Mortar and Pestle, Gloves, Paper Tissue Roll, Bunsen Burners, Porcelain Crucible, Funnels, Reagent Bottles, Tongs, Burner Stands, Litmus Papers, pH Papers, Hamato Balance, etc	35,995.00
4	Soil and plant sample processing and storage facility: Plywood Almirahs with glass doors and compartments, wall box with compartments and front glass door fittings, Laboratory platform partition, Wooden table with compartments and Wooden pestle and mortar.	44,100.00
	GRAND TOTAL	2,60,207.00

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	2850	2850	1456	142500
Water Samples	2316	2316	1634	231700
Total	5166	5166	3090	374200

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	295	295	295	14750
Water Samples	288	288	288	28800
Total	583	583	583	43550

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

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

A. Introduction of alternate crops/varieties : No

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Cereals (Ragi ML-365)	10	17
Total	10	17

PART XI. IMPACT

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

Name of specific	No. of	% of adoption	Change in inco	ome (Rs.)
technology/skill transferred	participants		Before (Rs./Unit)	After (Rs./Unit)
Introduction of Tanu paddy with pest & disease management	49	41.00	8,500	15,400
Introduction of GPBD-4 and RHC management	33	31.00	2,700	3925
Introduction of BRG-1 and pod borer management in redgram	53	38 %	6,000	9,200
Sunflower budnecrosis management with KBSH-41 hybrid	31	27.00	12,750	15,850
Preparation of Ragi malt	212	24.00		Rs 180/month
Introduction of MR-6 with biofertilizer	83	46.00	3,850	6300
Pest management in Bengalgram and introduction of JG-11	27	34.00	9,700	12,150
Introduction of Same	21	29	1500	3,800

11.B. Cases of large scale adoption

A. Introduction of BR-2655 paddy variety in Tumkur district-Successful case study

Background:

Paddy being the major cereal crop of the district occupies about 29,818 ha area with the productivity of 46.09 q/ha. The productivity is low as compared to national and state productivity. This could be attributed to use of local varieties, poor management of nutrients, pest and disease. To know the percentage parameter contribution for low productivity, KVK conducted a preliminary survey by means of group meetings, discussions, field visit and other techniques. The parameters were found to be

a)Agronomical management:

use of local varieties, poor land preparation, no seed treatment with bio fertilizer or chemicals, transplanting more number of seedling and use of aged seedlings, always flooding with water, imbalanced use of nutrients, non application of potassium and micro nutrients results in yield reduction.

b) Pest and disease management

Among pest, major were incidence of stem borer, leaf folder and sucking insects. In diseases blast is sever and in the last 3 years almost 30-40% area was severely affected by the diseases and results in yield loss.

Intervention of KVK

In the year 2002-03, KVK has conducted one OFT on blast management and during 2005-06, KVK has also conducted OFT on integrated nutrient management. Wherein, for the first time KVK has tried BR-2655. Further in the year 2006-07, the OFT tried was on Sri Method of paddy cultivation and the same OFT was continued in 2007-08 along with OFT on "sustainability in yield through effective water management. Hence KVK has given lot of importance for testing the suitability andfeasibility of paddy techniques in the district.

Looking to the severity of regular infestation of blast and its rapid increase and spread in the district, KVK Tumkur in the I PHASE gave training the farmers in villages where there was severe incidence of blast and has created awareness on the disease occurrence, identification of the disease and its effective control

In the II PHASE, KVK has conducted Front Line Demonstrations using BR 2655 variety with production technologies.

The characteristics of BR 2655 are

- a) long duration (140 to 145 days)
- b) tall variety and high fodder yielder
- c) blast tolerant
- d) low susceptibility to lodging

Table 4: The yield of BR-2655 under front line demonstration from the year 2005-06 to 2011-12

year	area	No of	yie	eld	% of	B:C ratio	B:C ratio
		demonst rations	Demo yield	Check yield	increa se	of demonstr ation	of check
2005-06	2.0	07	52.00	41.00	26.82	2.31	1.82
2006-07	5	18	58.85	44.27	35.40	2.94	2.21
2007-08	4	12	57.25	47.65	20.15	2.70	2.25
2009-10	10	26	63.50	51.50	23.30	3.86	3.30
2010-11	7	20	65.25	52.50	24.28	3.48	3.10
2011-12	7	18	61.00	50.50	15.30	3.35	2.77
		Average	59.64	47.90	24.20	3.10	2.57

The table indicated that over the years, there was a consistent increase in yield over the check (IR-64). The percentage yield was above 20 percent in all the years. Since the variety BR-2655 is high fodder yielder along with high grain yield, farmers prefer this for consumption as well as for fodder

Horizontal spread and popularization of variety

During the last five years, the variety was spread over 330 ha area with the aid of KVK and from farmer to farmer spread in the district due to its resistance to blast and high yield returns

Area of BR-2655(ha)	Adoption	of	Diffusion of technology(ha)
	technology(ha)		
	57		330

Average expenditure and income statement per ha.

	12 to 1 mg o on p on a rest of the state of				
Particulars	BR 2655	IR 64			
Yield (Q/ha.)	67.30	52.00			
Cost of cultivation	Rs. 18,600	Rs. 18,200			
Grain and fodder value	Rs. 71,300	Rs 49,800			
Net income (Rs.)	52,700	31,600			
B:C Ratio	3.8	2.7			

A. Redgram (BRG -1)- Boon for dryland

Background:

In Tumkur district, almost 80% of the area is under rainfed and receives an average rainfall 540 mm per year. Among the pulses, farmers are growing greengram, blackgram in pre-monsoon, horsegram in late kharif and redgram in regular monsoon period the redgram being hardy and drought tolerant pulse was able to integrate into the existing cropping system both sole as well as intercrop. Owing to poor returns of other agronomical pulse crops farmers have largely adopted redgram as major pulse crop in drylands of the district.

Redgram is an important pulse crop and its grown in 12,595 ha area with a productivity of 691 kg/ha. The achieved productivity is less than state productivity (800 kg/ha) and national productivity(925 kg/ha). The farmers of the district are getting low yield /unit area due to non adoption of improved varieties, improved production techniques and improper IPM measures

Intervention of KVK:

KVK intervention has led to the awareness of BRG-1 variety, an improved variety evolved by UAS, Bangalore during 2004. The exhaustive efforts through extension activities like training and demonstrations, the BRG-1 variety is getting popular through out the district. In the first PHASE, KVK, Tumkur has created the awareness of farmers regarding new improved varieties and IPM measures. In the 2nd PHASE, KVK conducting Front Line Demonstrations where technologies demonstrated are

- 1. Introduction of BRG-1 variety
- 2. Use of biofertilizer particularly rhizobium and PSB
- 3. Plant protection measures using pheromone traps @ 8-10 traps/ha, spraying of NPV@ 250 LE/ha
- 4. and spraying of ekalux against redgram pod borers)

There is a very good response from farmers regarding the use of BRG-1 variety. BRG-1 variety is having duration of 170-180 days, suitable for vegetable purpose and a high yielder. The farmers who are cultivating in lands nearly towns or cities, are getting more income as they can sell the immatured

red gram pods easily and on an average they get minimum of Rs. 20/kg and each red gram plant can give 20 kg green pods since the red gram crop is highly suitable for intercalating for conservation of soil and moisture, KVK Tumkur has conducted OFT's on

- 1. Redgram + Sunflower(1:2)
- 2. Redgram + Sesamum(8:2) after the harvest of sesamum sowing of horse gram can be done.

In these OFT's, the total income from these intercropping are very high when compared to sole crop of red gram and other crops. For accuracy and consistency, the above OFTs were continued in 2010-11 and frontline demonstration 2011-12 takenup. Now the farmers are also getting higher profit of Rs. 15,000 per acre through cultivation of sole redgram as compared to earlier profit of Rs. 6000. Thus KVK, Tumkur has become the prime source of technology in the district for BRG-1 and improved cultivation practices

Success story:

Sri Maridevaru is a progressive farmer, aged 58 years, is having regular contacts with staff of line departments and KVK. He is a resident of Yellapura, Tumkur taluk. He along with 25 farmers of Yellapura and surrounding villages attended programme of KVK, Konehalli, Tumkur Dt. During training programme, lot of discussion and exchange of views about various technologies were held between farmers and scientists. It came to the notice that, farmers are growing local seeds (own seeds) of redgram and are getting only 7-8 q/ha, due to own seeds, pest incidence and uneven distribution of rainfall in May and june. Hence, KVK, Konehalli, Tumkur Dt suggested an alternative of growing BRG-1 red gram variety which yields better. In this regard, KVK decided to implement front line demonstration on redgram variety BRG-1

Expenditure and income statement per ha.

Particulars	Farmers practice	Recommended practice
Yield (Q/ha.)	9.65	14.50
Cost of cultivation (Rs./ha.)	16,300	18,000
Gross income (Rs./ha)	21,230	43,500
Net income (Rs.)	4,930	25,500
B:C Ratio	1.30	2.4

He has got about 30 q. from 2 ha. And sold the seed material during kharif 2009 at the rate of Rs.30.kg and he has got Rs. 90,000. He has distributed seeds to nearly 250 farmers of Tumkur and Chitradurga dt. covering nearly 480 acres of area under BRG-1 and generated higher income . By looking at his success of earning more profit, about 150 farmers were motivated and started cultivation of BRG-1 variety in 100 ha. In neighbouring villages during kharif 2011.

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

	11.6. Details of impact analysis of KVK activities earlied out during the reporting period				
Paddy	1) Increase in area upto 200 ha	1) Area under Tanu was increased			
-Popularization of Tanu and BR-	under Tanu and 250 ha under BR-	to 170 ha due to demonstration			
2655 paddy variety	2655 which are high yielding and	and other extension activities			
	blast resistance varieties. Further,	2) Area under BR-2655 was			
	Tanu is suitable for late sowing.	increased to 225 ha			
	2) Increase in yield by 15-20%	3) Observed yield increase was			
	•	12%			
Redgram	1) Increase in area upto 500 ha	1) Increase in area was 450ha			
-Introduction of BRG-1 variety	under BRG – 1	under BRG-1			
and pest management	2) Pest management through eco 2) Increase in yield was				
	friendly IPM to save cost	variety and IPM practices			
	3) Increase in yield by 15%				
Fodder	1)Increase the area upto 12 ha	1) Area was increased to 8 ha			
-Introduction of CO-3	2)Increasing fodder yield by 10-	2)Fodder yield was increased by			
(Highly nutritive fodder)	15%	9.5%			

Vermicompost	1)Creating additional income	Technologies disseminated
-Scientific production of	generating opportunities for rural	through training and
vermicompost	youth and women	demonstration to farm women and
	2) Increase in income of Rs 400	rural youth
	per month per individual	2) Members started vermi
		compost production by obtaining
		assistance from line department
Animal health camp	1)Treating about 300 infertility	1) About 120 animals treated for
-Treating infertility cases	cases during camps	infertility
-Deworming in sheep	2)Deworming of about 2000 sheep	2)About 1300 sheep were treated
-Foot and mouth disease	3)Treating about 1100 animals for	for deworming
management	foot and mouth disease	3)650 animals for foot and mouth
		disease
Ragi: Popularization of MR-6	1) Increase in area upto 600ha	1) Increase in area was 525 ha
variety	under MR-6	2) 14% increase in yield was
	2) Increase in yield by 15%	observed
Same: Popularization of OLM-	1) Increase in area upto 40ha	1) Area increased to 30ha
203	2) Increase yield by 15 %	2) Increase in yield was 14 %

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
State Department of Agriculture, Tumkur Dist.	Conducting training programmes, Frontline Demonstrations, On Farm Testing and field days
State Department of Horticulture, Tumkur Dist.	Conducting training programmes, FLD's field visit
State Department of Animal Husbandry & Veterinary Services, Tumkur	Conducting Animal Health Camps, Training for Veterinary Officers & farmers
Department of Women & Child Welfare, Tumkur Dist.	Joint diagnostic survey, Conducting training to women Self Help Groups organizing programmes like nutrition week,world food day etc.
Department of Microbiology, UAS, Bangalore	Supplied Rhizobium, PSB, Azospirillum for FLD's and OFT's
Taluk Agricultural Produce Co-operative Marketing Society (TAPCMS), Tiptur, Arsikere.	Supplied Fertilizers, Gypsum, Neem Cake chemicals for FLD's and OFT's
General Hospital, Tiptur	Training for Womens, Child Health campaign
Gram Panchayats	Conducting training programmes to the farmers/farm women
Department of Watershed, Tumkur	Conducting training programmes to the Department officials, NGO's and farmers and financial aid for conducting training programmes
IIHR, Hesaraghatta, Bangalore	Technical information and critical inputs for FLD's and OFT's
Zuari Industries Ltd. Tumkur	Demonstrations and trainings
ORDER, NGO, Tumkur	Conducting training and demonstration

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.)
PHC and Disease forecasting unit	30-09-2008	Dept. of Horticulture	24,00,000
Establishment of VRC Centre	June 2008	ISRO	6,00,000
RKVY project	Sept. 2008	Dept of Agriculture	10,00,000
Esablishement of plant nursery	June 2009	Dept. of horticulture	18,00,000

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/ No: Yes(2008-09)

If yes, role of KVK in preparation of SREP of the district? Innovators Co-ordinator is prepared report along with other section

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

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraint s if any
1	Dry land Horticulture orchard establishment	Joint visit to farmers plots			
2	Banana orchard establishment	Joint visit to farmers plots			
3	Drip irrigation system establishment	Joint visit to farmers plots			
4	Establishment of plant health clinic and disease forecasting unit	Rs. 24,00,000 received for establishment of unit under NHM	24,00,000	14,00,000	
5	Establishment of plant nursery	Received Rs 18,00,000 for establishment of plant nursery to produce quality seedling	18,00,000	9,00,000	

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

12.F. Details of linkage with RKVY

	Details of minuge with that a				
S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
	Crop Improvement demonstrations, Crop Protection Demonstrations, IFSDs	Organizing Demonstration	1,26,317	48,995	
	HRD Activities a. Training programmes b.Training Programmes on value addition c.Farmers Field School d. Exposure Visits	Organizing Training programme	6,300	2,920	
	Field Days and District Level Krishimelas	Organizing Field visits	39,125		
	TA/DA		6,453		
	POL Charges		3,367		

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2011	4	570	50
May 2011	3	350	35
June 2011	2	460	20
July 2011	2	380	18
August 2011	3	410	12
September 2011	2	430	32
October 2011	3	395	42
November 2011	2	407	38
December 2011			
January 2012			
February 2012			
March 2012			

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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

Name	Date of	Date of	g (D	etails of product	ion	Amou	nt (Rs.)	Re
of the crop	sowing	harvest	Area (ha)	Variety	Type of Produce	Qty.	Cost of inputs		mar ks
Cereals									
Ragi	21-07-11	23-11-11	16	MR-6	Seed production	75.90			
				HR-911	Seed production	10.30			
				ML-365	Seed production	13.00			
				GPU-67	Seed production	3.70			
Pulses									
Redgram	14-06-11	29-01-12	16	BRG-1	Seed production	39.97			

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

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

13.E. Utilization of hostel facilities

Accommodation available (No. of beds): 30

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)		
April 2011			•		
May 2011	44	2			
June 2011	13	1			
July 2011	31	2			
August 2011	45	1			
September 2011					
October 2011	27	1			
November 2011	49	1			
December 2011	40	1			
January 2012					
February 2012	22	1			
March 2012	31	1			

13.F. Database management: NIL

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.		Activities		Quantity of water harvested in '000 litres	Area irrigated / utilization pattern		
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
9,52,000	9,52,000	Removal of shrubs, land leveling bunding plot formation construction of farm pond 90x90x9 ft size -Establishment of orchard -Mango -Sapota -Tamrind -Jamun -Guava -Custard apple -Establishement of coconut orchard -10 varities were planted -Providing irrigation through drip system to orchard Establishement of pump house and storage tank	5	02	Seed production activities carriedout	381	72	8ft depth water is stored	Not utilized Allowed for ground water recharge.

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch	Account	Account	MICR	IFSC Number
			code	Name	Number	Number	
With Host Institute	Canara Bank	Tiptur	699	With			CNRB0000699
				KVK	0699101022252		
With KVK	Canara Bank	Tiptur	699	Revolving			CNRB0000699
		_		fund	0699101025795		

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

	Utilization of KVK funds during the year 2011-12 (F	Rs. in lakh)		
S. No.	Particulars	Sanctioned	Expenditure	Balance
	curring Contingencies			
1	Pay & Allowances	4200000	4199241	759
2	•	120000	119883	117
	Traveling allowances	120000	119883	117
3	Contingencies	ı		
\boldsymbol{A}	Stationery, telephone, postage and other expenditure			
	on office running, publication of Newsletter and			
	library maintenance	200000	199954	46
В	POL, repair of vehicles, tractor and equipments	180000	179366	634
С	Meals/refreshment for trainees	100000	99585	415
D	Training material	30000	29582	418
Е	Frontline demonstration except oilseeds and pulses	200000	199840	160
F	FLD on special Pulses Programme	95000	92624	2376
G	On farm testing	100000	99652	348
Н	Training of extension functionaries	25000	24860	140
Ι	Maintenance of buildings	0	0	0
J	Extension Activities	40000	39175	825
K	Farmers' Field School	25000	24840	160
L	Library	5000	2859	2141
	TOTAL (A)	5320000	5311461	8539
B. No	n-Recurring Contingencies	I		
1	Works	3333000	3333000	
2	Equipments including SWTL & Furniture	300000	300000	
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library			
5	Vehicle			
	TOTAL (B)	3633000	3633000	
C. RE	EVOLVING FUND			
	GRAND TOTAL (A+B+C)	8953000	8644461	8539

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	2,84,102	2,81,727	1,97,820	3,68,009
April 2010 to March 2011	3,68,009	3,37,604	1,68,419	5,37,194
April 2011 to March 2012	5,37,194	4,78,794	6,46,176	369,812

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
Dr. Kumara, O	Programme Co-ordinator	Orientation programme	KVK, Namakkal, Tamil nadu	31-01-2012 to 04- 02-2012
Smt Mamatha H.S,		Capacity building programme on commodity future marker Brain storming Session on Grain Amaranths Nutritional	Dept of Agriculture marketing and business marketing	26-27 December 2011
	SMS(H.Sc)	importance, value addition and its use in Bakery and other food industries 3)Value addition to traditional dairy products	GKVK, Bengalore	28-30 March 2012
			Dairy Science College, Hebbal, Bengalure	
Dr. Srinivasa Reddy K.M	SMS(Plant Protection)	Bio national pest management	TNAU, Tamil nadu,	16-Feb-2011 to 09, mar-2011
Mr. Nagappa Desai	SMS(Hort.)	1.Vegetable, flower and fruit crops 2. Plastic Application like Microirrigation, Green house technology, Plastic Mulching, Farm Pond Lining, etc.	IIHR, Banaglore Division of Hort. UAS Bangalor.	18 th &19 th Jan. 2012 18 th &19 th May 2011
Mr. Shankara, M.H	SMS(Agril. Extn.)	1)Training methods for trainers 2) Induction training programme	MANAGE Hyderabad STU, Hebbal, UAS, Bangalore	09-14 Jan2012 1 to 15 Feb 2012
Dr. Manjunath Sugur	SMS(A.Sc)	Newer approaches for feed security and safety	Indian veterinary Research Institute Izathnagar	9-29 February 2012

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

Farmers Field School during 2011-12

Crop		Techr	nology		Area (ha)	Funding Agency	Village/ Taluk
Tomato (Arka Ananya)	Integrated Tomato	crop	Management	in	1.0	KVK (ICAR)	Hosapatna Tiptur-tq.

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	Coconut	Technology Option I : Farmer's practice : Coconut + sorghum/horsegram Technology Option II : Coconut + Cowpea Technology Option III : Coconut + Mucuna	7
Management	Banana	To1: 1.8m x 1.8m spacing (3000 pl/ha) To2: 2.1m x 2.1 m spacing (2268 pl/ha) To3: Paired row planting with zig zag method (2 m x 1.2m x 1.2m)	4
Varietal Evaluation	Chilly	Technology Option 1: Farmer's Practice(Private varieties/hybrids), not using imidocloprid & neem cake Technology Option 2: *Arka meghana, withNursery spray of imidacloprid @ of 0.3 ml/lt, root dipping in imidacloprid @ 0.3 ml/lt, *Application of neem cake @ 250kg/ha Technology Option 3: *Arka harita with Nursery spray of imidacloprid @ 0.3 ml/lt Root dipping in imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha Technology Option 4: Arka swetha withNursery spray of imidacloprid @ of 0.3 ml/lt ,root dipping in imidacloprid @ of 0.3 ml/lt Application of neem cake @ 250kg/ha	4
Integrated Pest Management	Coconut	Technological Option 1: Applying complex fertilizer, 200gm/palm, 10 kg FYM/palm Technological Option 2: 50FYM, 500:320:1200gm NPK/plant/year 5kg neemcake/palm, 50gm borax/palm/year 500gm MgSo ₄ /palm/year Eco neem 1% 10ml/palm, 3 times/year Technological Option 3: 50FYM, 500:320:1200gm NPK/plant/year 5kg neemcake/palm, coconut tonic(200ml/palm) twice a year in 6 month interval, 50gm borax/plant	5
Integrated Crop Management	Greengram	Technology Option 1: *Use of local varieties * Unevenly prepared soils and higher seed rate *Sowing of ragi after harvest of greengram Technology Option 2: * Use of improved varieties *Sequence cropping grown: ragi after the harvest of greengram Technology Option 3: * Greengram and redgram intercropping (8:2) * Simultaneous sowing of greengram and redgram(BRG-1) during late April or early May *Transplanting of Ragi after the harvest of greengram Technology Option 4: * Greengram and redgram intercropping (8:2) * Simultaneous sowing of greengram and redgram(BRG-1) during	5

	late April or early May	
	*Sowing of horsegram after the harvest of greengram	
Maize	Technology Option 1:	5
	*Continuous monocropping, use of Private hybrids, closer	
	spacing 50cm x 20cm, multiheads,	
	non adoption of intercropping, poor seed setting, improper	
	nutrient management, extent of	
	yield loss 40%	
	Technology Option 2:	
	* Intercropping of maize with soybean in 2:2 ratio,	
	improvement in soil fertility due to leaf	
	falling and other crop waste at harvest	
	Technology Option 3:	
	*Intercropping of maize with French bean in 2:2 ratio	
	improves soil fertility and higher income	
Sunflower	Technology Option 1:	5
	farmers grow sunflower after sunflower crop, no intercropping is	
	followed, closer spacing	
	Technology Option 2 : Rotation of crop, spacing i.e., 60x30cm	
	Technology Option 3:	
	Rotation of crops, spacing 60x30cm, Intercropping of sunflower	
	and redgram in 2:1 ratio	
Redgram	Technology Option 1:	7
	* Pure cropping ,Closer spacing followed(60x15 cm) ,use of TTB-	
	7 and Hyd-3C	
	Technology Option 2:	
	*Direct sowing of redgram(90x 15cm spacing), use of BRG-1	
	improved variety	
	Technology Option 3:	
	*Transplanting of 40 days old seedlings which are raised in	
	polythene bags to achieve uniform stand and higher yield, spacing	
	(120x30 cm spacing), using	
	BRG-1 seeds	
Total		44

Summary of technologies assessed under livestock: NIL

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

Summary of technologies assessed under various enterprises: NIL

Summary of technologies assessed under home science: NIL

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops: NIL

Summary of technologies assessed under refinement of various livestock : ${\bf NIL}$

Summary of technologies refined under various enterprises :NIL

Summary of technologies refined under home science :NIL

II. FRONTLINE DEMONSTRATION

Crops

Crop	Thematic area	Name of the technology	No. of	No. of	Area	Yield ((q/ha)	% change in yield	Other parame	eters	*Econoi		nonstration	(Rs./ha)		*Economic (Rs.		
	Thematic area	demonstrated	KVKs	Farmer	(ha)	Demons ration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals Paddy (BR-2655)	-Blast management	-Popularization of BR – 2655 -Nutrient & disease management		18	7	61.00	50.50	15.30			20000	67100	47100	3.35	20000	55550	35550	2.75
Paddy (Tanu)	Yield maximization	-Popularization of Tanu -Seed treatment with Carbendazim and Bio- fertilizers -Nutrient management		19	5	59.30	58.50	15.82			20,000	65230	45230	3.26	20000	56320	36320	2.81
Millets																		
Ragi (KMR-301)	-Production technology	Popularization of KMR-301 for high yielding and blast tolerance		13	5	25.0	21.5	16.27			10000	22500	12500	2.25	10000	19350	9350	1.93
Ragi (ML-365)	-Production technology	Popularization of ML-365 for high yielding and blast tolerance		17	10	21.5	19.5	10.25			10,000	19350	9350	1.93	10000	17550	17550	1.75
Ragi (GPU-66)	-Production technology	Recommended dose of fertilizer 50: 40:25 NPK kg/ha -FYM-7.5 t/ha -Azospirillium@ 2 kg/ha -PSB @ 2 kg /h		18	10	23.0	20.3	13.3			10000	20700	10700	2.07	10000	18270	8270	1.82
Ragi (GPU-48)	-Productivity enhancement in green gram - Ragi based cropping system	-Popularization of GPU 48 for late sowing and blast incidence -Intercroping with redgram (8:2) -Nutrient management		2	1	23.5	19.50	20.51			10000	21150	11150	2.11	10000	17750	7550	1.77
Same (OLM-203)	Production technologies	-Introduction of OLM-203		5	5	13.5	10.5	7.0			9000	24300	15300	2.7	9000	18900	8900	2.1

0.1			 						 							
Oilseeds	1		. <u> </u>	<u>, </u>	<u> </u>	<u> </u>		<u> </u>	 <u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	1
Castor (DCH-177)	Productivity enhancement of Castor through Integrated crop management	-Variety: DCH-177 -Recommended Dose of Fertilizer: 38: 38: 25 NPK kg/ha (Based on STCR) -PSB- 50gm/kg of seed -Trichoderma 10gm/kg of seed -FYM: 5 ton/ha -Use of bird perches -Use of Methyl parathion 1ml/lit	13	4	10.50	9.0	16.6		12500	31500	19000	2.52	10500	27500	16500	2.61
Groundnut (Chintamani-2)	Productivity enhancement of groundnut through INM	- Recommended Dose of Fertilizer: 25: 50: 25 NPK kg/ha (Based on STCR) -FYM: 7.5 ton/ha -Seed treatment with Trichoderma @4gm/kg and rhizobium @375gm/ha -Soil drenching with chloropyriphos @ 1.5 lit/ha -Intercropping with Redgram (4:1) -Gypsum application @ 500 kg/ha	10	5	11.0	10.5	20.0		14000	33000	19000	2.35	14000	31500	17500	2.25
Pulses	1	'	, 	1	1	1 '	'	1 '	1 '		'					
Redgram (BG-1)	Harnessing Redgram productivity	-Variety: BRG-1 -Recommended Dose of Fertilizer: 25: 50: 25 NPK kg/ha (Based on STCR) -IPM measures: Cultural: Deep ploughing to expose immature stages of pests Use of pheromone traps Biological: NPV@ 250 LE/ha Chemical:Indaxicarb @0.5ml/lt	26	10	11.5	10.0	15.0		11000	34000	23500	3.09	11000	30000	19000	2.72
Greengram (S-4)	Yield maximization in greengram through ICM	Variety: S-4 -Recommended Dose of Fertilizer: 13:25:25 NPK kg/ha (STCR) -Seed treatment with Rhizobium @ 375 gm/ha -Dimethoate: 1.7ml/lt	12	5	9.50	8.1	17.28		10000	38000	37000	3.80	10000	32400	22400	2.72

Bengalgram (JG-11)	Integrated crop management in Bengalgram	-Introduction of JG -11 -Use of Trichoderma -Plant Protecton measures(Indaxicarb)		5	5	12.5	10.5	19.0		12000	37500	25500	3.12	12000	31500	19500	2.62
Bengalgram (JG-11)	Integrated crop management in Bengalgram	-Introduction of JG -11 -Use of Trichoderma -Plant Protecton measures(Indaxicarb)		27	27	12.1	10.2	18.6		12000	36300	24300	3.02	12000	30600	18600	2.55
Pulses	Pulses, Stored grain Pest Management	Management of bruchids in pulses		10	10							Under p	progress				
Vegetables	·			ŀ		'									'	1	1
Chilli (Arka suphala)	Production technology	Improved Chilly variety Arka Suphal		9	1.5	165	138	19.66		45,000	1,65,000	1,15,000	3.67	42,000	1,38,000	96,000	3.29
Tomato(Arka Ananaya)	ICM	-Using Arka Ananya, marigold seeds -Tricoderma viridae 2kg Neem cake soil application -Imidoclophrid -Neem Soap		6	1.5	385	330	16.66		56,000	2,40,000	1,84,000	4.29	50,000	1,65,000	1,15,000	3.30
Brinjal (Arka Anand)	ICM and Pest management	-Introduction of Arka Anand -Root dipping in Trichoderma harzianum 20gm/lt -Using neem cake 250kg/ha		5	1.0							Under p	progress				
Fruit												1				1	
Banana	INM	Foliar application of Banana special for higher yield 5gm/lt - 4 sprays 5 th , 6 th , 7 th and 8 th month after planting and last spray on floral part and bunch		5	1.0							Under p	progress				
Plantation			 		 									 			
Arecanut	INM	INM MOP 230 m/pl Borax 25 gm/pl		5	1.5	16.5	14.25	13.8		48,000	1,81,500	1,33,500	3.78	48,000	1,59,500	1,11,500	3.32

Coconut	IPDM Root feeding of 2% Tridomorph @ 100ml/plant -Application of Trichoderma -Application of neem cake -Digging isolation trenches Demonstration of use of traps - Demonstration of application of	5	100 palms							
Coconut	carbaryl									
	Total									

Livestock

Cotogory	Thematic area	Name of the technology	No. of	No. of	No.of	Major pa	arameters	% change in major parameter	Other par	rameter	*Econ	omics of de	monstration	(Rs.)		*Economics (Rs		
Category	Thematic area	demonstrated	KVKs	Farmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																		1
Azolla	Maintaing milk production	Azolla cultivation for dairy cows		4	4						600	1500	900	2.5				
Poultry		,														,		
swarnadhara layer birds	Enhancing the productivity in poultry birds	Backyard rearing of swarnadhara layer birds		15	20 birds	130	60-70	2-3 times			1400	6100	4700	4.35	900	3000	2100	3.3
Sheep and goat																		
Goat(Jamunapari	Up gradation of local Goats	Up gradation of local goats using Jamunapari buck		2	2				,	Under	progress							
Sheep(Bannur ram)	Up gradation of local sheep	Up gradation of local sheep using Bannur ram		4	4					Under	progress							
Fodder (COFS-29)	Maintaining productivity in fodder	Cultivation of COFS 29 fodder variety		25	25	560	300	86			10000	52000	42000	5.2	4200	10400	6200	2.4

2	2								
			Under progress						
			Onder progress						
	2	2 2	2 2	2 2 Under progress					

Fisheries:NIL

Other enterprises :NIL

Women empowerment: NIL

Farm implements and machinery :NIL

Demonstration details on crop hybrids

Стор	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / n	najor parame	eter		Economics	s (Rs./ha)	
				Demonst- ration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Oilseeds										
Castor	DCH-177	13	4	10.50	9.0	16.6	12500	31500	19000	2.52
Total										

IV. Training Programme

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			Grand Total	
C. D. L. C.		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Resource Conservation Technologies	14	44	18	62	26	12	38	70	30	100
Cropping Systems	1	14	-	14	08	1	08	22	-	22
Crop Diversification										
Integrated Farming	02	79	-	79	19	1	19	98	-	98
Micro Irrigation/Irrigation										
Seed production	03	174	06	180	32	-	32	206	06	212
Nursery management										
Integrated Crop Management	04	72	03	75	24	1	24	96	03	99
Soil and Water Conservation	11	352	-	352	98	-	98	450	-	450
Integrated Nutrient Management	01	31	-	31	05	-	05	36	-	36
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	01	13	12	25	02	04	06	15	16	31
Nursery raising	01	21	-	21	06	-	06	27	-	27
Cultivation of Fruit	01	17	-	17	07	-	07	24	-	24
d) Plantation crops										
Production and Management technology	02	66	08	74	17	02	19	83	10	93
Soil Health and Fertility Management										
Soil fertility management	02	14	-	14	40	-	40	54	-	54
Integrated water management										
Integrated nutrient management	02	38	-	38	08	-	08	46	-	46
Livestock Production and Management										
Dairy Management	01	61	07	68	22	-	22	83	07	90
Home Science/Women empowerment										
Value addition	01	-	188	188	-	66	66	-	254	254
Women and child care	01	19	18	37	05	07	12	24	25	49
Capacity Building and										
Group Dynamics Entrepreneurial development	01	51	-	51	18	-	18	69	-	69
of farmers/youths TOTAL	49	1066	260	1326	337	91	428	1403	351	1754

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

	No. of				No	o. of Particip	ants			
Area of training	Courses	Mala	General	T-4-1	Mala	SC/ST	T-4-1	Mala	Grand Total	
Crop Production		Male	Female	Total	Male	Female	Total	Male	Female	Total
Resource Conservation Technologies	03	95	03	98	24	-	24	119	03	122
Integrated Farming	03	97	04	101	13	02	15	110	06	116
Seed production	01	28	05	33	12	-	12	40	05	45
Integrated Crop Management	04	77	02	79	21	-	21	98	02	100
Integrated Nutrient Management	01	26	-	26	02	-	02	28	-	28
Horticulture										
a) Vegetable Crops										
Production of low value and high	02	28	46	74	04	14	18	32	60	92
volume crop							_			
b) Fruits										
Cultivation of Fruit	04	105	05	110	28	01	29	133	06	139
c) Ornamental Plants										
Nursery Management	01	-	47	47	-	08	08	-	55	55
d) Plantation crops										
Production and Management technology	03	52	20	72	12	06	18	64	26	90
Processing and value addition	03	107	62	169	18	28	46	125	90	215
Soil Health and Fertility										
Management Soil fertility management	01	52	-	52	12	-	12	64	-	64
Integrated nutrient management	01	47	07	54	14	-	14	61	07	68
Livestock Production and										
Management Dairy Management	02	24	34	58	06	12	18	30	46	76
Poultry Management	01	15	03	18	02		02	17	03	20
Animal Nutrition Management	01	08	29	37	- 02	04	04	08	33	41
Animal Disease Management	01	00		37		04	04	00	33	71
Feed and Fodder technology	03	31	48	79	06	15	21	37	63	100
Home Science/Women	03	31	40	19	00	13	21	31	03	100
empowerment										
Household food security by kitchen gardening and nutrition gardening	03	186	18	204	38	02	40	224	20	244
Design and development of low/minimum cost diet	01	1	23	23	-	04	04	-	27	27
Designing and development for high	01	-	92	92	-	71	71	-	163	163
nutrient efficiency diet Minimization of nutrient loss in	01	35	12	47	07	-	07	42	12	54
processing Processing and cooking	01	-	125	125	-	39	39	-	164	164
Gender mainstreaming through	01	-	42	42	-	08	08	-	50	50
SHGs Value addition	04	140	08	148	31	_	31	171	08	179
Women empowerment	01	47	-	47	08	-	08	55	-	55
Women and child care	01	-	48	48	-	12	12	-	60	60
Agril. Engineering	UI	-	40	40	-	12	12	-	00	00
Post Harvest Technology	02	78	17	95	11	04	1.6	89	21	100
	02	/8	1 /	95	11	04	16	89	21	100
Plant Protection								<u> </u>		

Integrated Pest Management	12	327	61	388	56	22	78	383	83	466
Integrated Disease Management	07	230	30	260	110	09	119	340	39	379
Bio-control of pests and diseases	01	24	-	24	-	-	-	24	-	24
Production of bio control agents and bio pesticides	01	14	-	14	06	-	06	20	-	20
TOTAL	71	1873	791	2664	441	261	702	2313	1052	3365

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

	No. of				No. of	Participant	ts			
Area of training	Courses		General			SC/ST			Grand Tota	ıl
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Commercial fruit production	03	108	-	108	42	-	42	150	-	150
TOTAL	03	108	-	108	42	-	42	150	-	150

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

	No. of				No. of	Participant	s			
Area of training	Courses		General			SC/ST			Grand Tota	ıl
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	49	-	49	24	-	24	73	-	73
Value addition	03	41	06	47	14	02	16	55	08	63
Dairying	01	01	22	23	-	09	09	01	31	32
TOTAL	05	91	28	119	38	11	49	129	39	168

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

	No. of				No. of	Participan	ts			
Area of training	Courses		General			SC/ST			Grand Tota	ıl
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in	01	18	08	26	08	04	12	26	12	38
field crops										
Integrated Pest Management	01	111	05	116	59	-	59	170	05	175
Women and Child care	01	-	38	38	-	24	24	-	62	62
Low cost and nutrient efficient	03	128	09	137	42	06	48	170	15	185
diet designing										
Total	06	257	60	317	109	34	143	366	94	460

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

Area of training	No. of	No. of Participants								
	Courses	General		SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Low cost and nutrient efficient diet designing	01	27	14	41	11	08	19	38	22	60
Any other (pl.specify)										
Total	01	27	14	41	11	08	19	38	22	60

Sponsored training programmes

S.No.	A (64	No. of Courses		No. of Participants							
	Area of training		General		SC/ST		Grand Total		l		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Soil health and fertility management	13	341	-	341	163	-	163	504	-	504
2	Water resource conservation technology	02	39	21	60	31	09	40	70	30	100
3.	Integrated nutrient management	01	29	-	29	17	-	17	46	-	46
	Total	15	409	21	430	211	09	220	620	30	650

Details of Vocational Training Programmes carried out for rural youth: NIL

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Diagnostic visits	8	72	13	85
Field Day	7	387	12	399
Group discussions	36	377	21	398
Film Show	11	253	53	306
Exhibition	5	10865	210	11075
Scientists' visit to farmers field	20	258		258
Method Demonstrations	27	107	10	117
Celebration of important days	5	604	25	629
Exposure visits	3	64		64
Total	122	12987	344	13331

Details of other extension programmes

Particulars	Number
Extension Literature	4
News paper coverage	24
Technical Bulletins	1
TV Talks	3
Training Manuals	3
Total	

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Paddy	Aerobic		0.8	800	1
	Ragi	MR-6		75.90	100800	
	Ragi	HR-911		10.30		
	Ragi	ML-365		13.00		
	Ragi	GPU-67		3.70		
	Same	OLM-203		21.00	31500	
Oilseeds						
Pulses	Redgram		BRG-1	39.97	179865	
Others (specify)	Same straw	OLM-203		2 load	5000	2
	Ragi straw			13 load	32500	8
	Redgram husk	BRG-1		1 load	2500	2
Total				164.67	3,52,965	13

Horticulture Nursery Seedling Production (2011-12) under NHM project

Sl. no	Name of the seedling produced	Total quantity produced	Total quantity sold	Balance as on 30-03-2012	Amount (Rs.)
1.	Chilli	66,175	66,175	000	25,118
2.	Tomato	14,200	14,200	000	
3.	Brinjal	8,500	8,500	000	
4.	Drum stick (Bhagya, PKM-1)	3,300	2,000	300	20,000
5.	Papaya (Surya)	3,500	3,000	500	30,000
6.	Arecanut (Hirehalli tall)	12,000	900	11,100	13,500
7.	Sapota (Cricket ball)	12,588	4,588	8,000	1,83,520
8	Mango	500	000	500	
	Total			20,400	2,72,138

Production of livestock and related enterprise materials: NIL

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	295	295	295	14750
Water	288	288	288	28800
Total	583	583	583	43550

VIII. SCIENTIFIC ADVISORY COMMITTEE: NIL

X. RESEARCH PAPER PUBLISHED

Number of research paper published: 23

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

Activities conducted							
No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)			
5	02	Seed production activities carried out	381	72			

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