# ANNUAL PROGRESS REPORT

(April 2009 – March 2010)

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## PART I - GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Taralabalu Krishi Vigyan Kendra Kadalivana, LIC Colony Layout, B.I.E.T. Road, Davanagere – 577 004	08192 – 263462	08192 – 260969	dvgtkvk@yahoo.com	www.taralabalukvk.com

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

Address	Telepho	one	E mail	Web Address
	Office	FAX		
Taralabalu Rural Development Foundation Sirigere – 577541 Chitradurga (Dist.)	08194 – 268829, 268842	08194 - 268847	trdf@taralabalu.org	www.taralabalu.org

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

Name	Telephone / Contact				
	Residence	Mobile	Email		
Dr. Devaraja T.N.		094498 – 56876	tngdevaraja@yahoo.co.uk		

**1.4. Year of sanction:** 2004

# 1.5. Staff Position (as on 31<sup>st</sup> MARCH 2010)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)
1	2	3	4	5	6	7
1	Programme	Dr. Devaraja T.N.	Programme Coordinator	M	Fisheries	Ph.D.
	Coordinator					(Aquatic Biology)
2	Subject Matter Specialist	Mr. Basavanagowda M.G	Subject Matter Specialist	M	Horticulture	M.Sc. (Hort.)
3	Subject Matter Specialist	Mr. Mallikarjuna B.O	Subject Matter Specialist	M	Agronomy	M.Sc. (Agri.)
4	Subject Matter Specialist	Dr. Jayadevappa G.K.	Subject Matter Specialist	M	Animal Science	M.V.Sc. (Animal
						Nutriton)
5	Subject Matter Specialist	Mr. Raghuraja J.	Subject Matter Specialist	M	Agriculture Extension	M.Sc.
6	Subject Matter Specialist	Mr. Prasananna Kumara N.	Subject Matter Specialist	M	Plant Protection	M.Sc. (Agri.)
7	Subject Matter Specialist	Dr. Pradeep H.M.	Subject Matter Specialist	M	Soil Science	Ph.D. (Soil Science
						& Agricultural
						Chemistry)
8	Programme Assistant	Miss. Kavitha P.	Programme Assistant	F	Home Science	M.H.Sc. (Human
	( Lab Tech.)/T-4		(Lab Tech.)			Development)
9	Programme Assistant	Mr. Santhosh B.	Programme Assistant	M	Computer	B.Sc. (Computer
	(Computer)/ T-4					Science)
10	Programme Assistant/	Mr. Vijayakumar S.B.	Programme Assistant	M	Farm Manager	M.Sc. (Plant
	Farm Manager					Breeding & genetics)
11	Assistant	Mr. Mallikarjuna S.Gudihindala	Assistant	M	Assistant	B.Com.
12	Jr. Stenographer	Mrs. Mamatha H. Melmalagi	Jr. Stenographer	F	Jr. Stenographer	B.Com. + Shorthand
13	Driver	Mr. Marulasiddaiah N.M.	Driver	M	Driver	BA
14	Driver	Mr. Shivakumara S.	Driver	M	Driver	S.S.L.C.
15	Supporting staff	Mr. Shivakumara B.	Supporting staff	M	Supporting staff	S.S.L.C.
16	Supporting staff	Mr. Shivakumara S.E.	Supporting staff	M	Supporting staff	S.S.L.C.

Name of the incumbent	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
3	8	9	10	11	12
Dr. Devaraja T.N.	12000-420-18300	12840	17-05-05	Permanent	Others
Mr. Basavanagowda M.G	8000-275-13500	8550	21-11-06	Permanent	Others
Mr. Mallikarjuna B.O	8000-275-13500	8275	09-01-08	Permanent	Others
Dr. Jayadevappa G.K.	8000-275-13500	8275	29-01-08	Permanent	Others
Mr. Raghuraja J.	8000-275-13500	8275	23-06-08	Permanent	Others
Mr. Prasananna Kumara N.	8000-275-13500	8275	24-06-08	Permanent	Others
Dr. Pradeep H.M.	8000-275-13500	8275	25-06-08	Permanent	Others
Miss. Kavitha P.	5500-175-9000	6200	01-06-05	Permanent	OBC
Mr. Santhosh B.	5500-175-9000	5500	05-09-08	Permanent	Others
Mr. Vijayakumar S.B.	5500-175-9000	5500	23-06-08	Permanent	Others
Mr. Mallikarjuna S.Gudihindala	5500-175-9000	8125	01-06-05	Permanent	OBC
Mrs. Mamatha H. Melmalagi	4000-100-6000	4400	06-06-05	Permanent	Others
Mr. Marulasiddaiah N.M.	3200-85-4900	3455	01-06-05	Permanent	Others
Mr. Shivakumara S.	3200-85-4900	3455	01-06-05	Permanent	Others
Mr. Shivakumara B.	2550-55-2660-60-3200	2780	01-06-05	Permanent	Others
Mr. Shivakumara S.E.	2550-55-2660-60-3200	2780	01-06-05	Permanent	Others

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

S. No.	Item		Area (ha)
1	Under Buildings		1.75
2.	Under Demonstration Units		0.25
3.	Under Crops		8
4.	Orchard/Agro-forestry		5
5.	Others		
		Total	15

# 1.7. Infrastructural Development:

## A) Buildings

		Source of	Stage					
S.		funding		Complete			Incomplete	9
No.	Name of building		Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1	2	3	4	5	6	7	8	9
1.	Administrative Building	ICAR	04-01-2008	550	29.37			
2.	Farmers Hostel	ICAR	04-01-2008	300	18.82		300	
3.	Staff Quarters	ICAR	04-01-2008	400	19.40		400	
	1							
	2		-			-		Completed
	3							Completed
	4							
	5		-			-		
	6					-		

1	2	3	4	5	6	7	8	9
4.	Demonstration Units	ICAR	04-01-2008	160	6.41			Completed
	1. Dairy unit							
	2. Mushroom unit and							
	Vermicomposting enriching							
	unit.							
5	Fencing							Sanctioned
								and grants
								awaited
6	Rain Water harvesting							Not applicable
	system							
7	Threshing floor		-	-				Sanctioned
8	Farm godown							and grants
								awaited

# B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tempo Cruiser	2005	4,99,250/-	85527	Good
Tractor & Trailer	2005	4,99,995/-	1478 hr.	Good
Hero Honda CD Deluxe	2006	39,298/-	27669	Good
Power tiller (Funded by Cotton	2008	99,400/-		Good
FLD)				
Yamaha Alba	2009	48,309/-	7516	Good

# C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Mixer	2005	3,300/-	Good
Xerox Machine	2006	73,840/-	Good
Digital Camera	2006	19,900/-	Not in working condition
Over Head Projector	2006	19,935/-	Good
TV with DVD Player (Funded by SHIMUL)	2006	11,350/-	Good
Refrigerator (LG)	2007	10,000/-	Good
Computer +LCD	2007	1,00,103/-	Good
VRC System (Funded by UAS, Bangalore)	2008		Good
Fax (4 in one)	2009	15,000/-	Good

1.8. A). Details SAC meeting conducted in 2009-10

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	22-05-2009	18	10	To taken up one FFS every year depending upon the thrust area and document the results properly.	FFS on Paddy (ICM) is conducted during Kharif 2009-10, Several parameters are documented.
				Krishi Vigyan Kendra to provide technical advisory service to ATMA, to develop technology models suitable for the district and arrange interface between farmers and scientists	Technical advises are extended to ATMA by KVK SMS as resource persons. Arranged 2 interface meetings between farmers and scientists – one during National fish farmers day and other with BARC scientist.
				To implement a few technologies brought from Namakal and Dharmapuri KVKs especially on precision farming and Marketing network, Animal husbandry units.	Fodder demo plots, Azolla production unit, Cotton precision farming unit are established during this Kharif 2009-10
				To make arrangements for the celebration of 'Technology Week' at TKVK instructional farm	Crop courts of FLDs and OFTs are prepared. Other demo units are geared up for technology week. It is proposed during 2 <sup>nd</sup> week of October 2009
				To take up one demonstration from each sanctioned FLD in Krishi Vigyan Kendra instructional farm which helps greatly in Technology week celebration. FLD should address the local problem.	It is carried out as advised by the council.
				To include details of economics involved in each enterprise (IFS oriented) while developing brochures.	It is noted and included in our new brochures.
				To establish laboratory under revolving fund account for the production of Trichoderma.	Laboratory is made ready. Production is under way.
				To make impact study of dairy training programme under RSVY scheme (at least one village)	It is carried out this kharif 2009-10 in Kenchanahalli village of Harihara taluk.
				To invest money for developing technology products under revolving fund account. For this purpose take proposals from different SMSs and allot money accordingly as far as possible produce materials required for FLDs.	Vermicomposting unit, Earthworms production unit, Azolla unit, fish seed production unit, drumstick, nursery, fodder plots are established to provide quality

			materials for FLDs.
		ve Home Science Specialist in FLDs wherever specially in Horticulture and Animal Science.	It is planned during this Kharif (2009-10)
	To launch	Krishi Vigyan Kendra website at the earliest.	Website is ready and to be launched within this year (2009).
	Delivery 1	'Case Study Book' (Models of Technology Mechanism –Experience of KVKs) developed by ice by each SMS.	All SMS have read through the said book and drawn inspiration to emulate the successful technologies.
		5-6 farmers to Dharmapuri for seeing precision Farmer-Farmer interface)	It is planned during this summer (2009-10).
		technologies developed by UAS, Bangalore for and give report.	Six technology of UAS (B) are being assessed this year (2009-10).
		op small Animal Husbandry units viz., Sheep, ltry (Turkey), Gir bull semen collection centre etc.	Units of sheep, goat and poultry are planned and will be established this year (2009).

2.	29-10-2009	20	08	To average farmers visit to precision farming fields in	17 Banana growing farmers have visited
				Dharmapuri district	precission farming fields in April 2010
				To submit proposal to establish plant health clinic in KVK	The proposal has been submitted to
					department of Hortiuclture, Davanagere
				To conduct training under National Horticulture Mission	The trainings under NHM are awaited.
				(NHM)	Conducted training (28 farmers) under
					and 11 trainings (232 farmers) under
					National organic agriculture mission
				To popularize Azolla feeding to milch animals.	Conducted one day workshop on A-Z of
					Azolla, more than 100 farmers participated
					in the workshop
				To work on popularization of paddy transplanter	Demonstration on paddy transplanter will be
					conducted in Kharif 2010
				To establish IFS demonstration unit in KVK	Proposal to establish IFS unit in KVK has
					been submitted to ICAR
				To develop agroforestry area in Kesarivana by getting	1500 seedlings were planted in agro forestry
				suitable seedlings from department of forestry.	area
				Farmers opinion regarding income generating activities to	FLD on "Banana special, vegetable special,
				be "Voice recorded"	sunflower and Bt cotton" have been
					recorded.

3.	20-03-2010	18	10	To train Horticulture trainees from Siddanur village on Post	
				Harvest Technologies	
				To promote farmers growing organic vegetables and helping	
				them to market those products.	
				To promote tree based farming among farmers.	
				To conduct more number of vocational training programmes.	
				To link FFS activities to Annadata TV programme.	
				To justify the OFTs and FLDs conducted repeatedly.	
				To conduct more of Field Days in extension activities.	
				To continue OFT on Tur transplanting.	
				To popularize Agri-Horti-Silvi – Pasture in Siddanur village	
				Encourage pulse production among farmers.	
				To document data in computer especially field visit and	
				recommendation given. i.e. To use computer for more of	
				technical purposes.	
				Scientific information dissemination through mobile phones	
				should be documented.	
				Suggested to prepare a booklet on different schemes /	
				programmes available from different line department pertaining	
				to KVK mandates. Action to be taken by SMS (Agricultural	
				Extension).	
				In waste lands, KVK has to popularize the cashew crop.	
				To avoid use of grain such as Ragi for Cattle feed and insisted	
				for use of other grains locally available at cheaper cost.	
				To record straw and grain yield in the Demo plots for better	
				comparison among crops.	
				To popularize fodder varieties of IGFRI, for which it is ready to	
				supply planting material required.	
				To incorporate Lucerne feeding in fish culture.	
				To promote growing of Lucerne among small Dairy farmers.	
				SMS (Extension) should meet Lead Bank Manager and collect	
				information about schemes for rural youths and women.	
				To establish plant health clinic at KVK.	
				Activities on maintenance of plant protection equipments should	
				be given priority.	
				To popularize pulses as intercrop in Maize, Growing pulses	

	improves the soil fertility.	
	To conduct sensitization programme for Agriculture Extension	
	officers and Farmers regarding availability of loan facility from	
	Banks.	
	To popularize subabul trees plantation and Azolla cultivation to	
	alleviate fodder scarcity.	
	To educate farmers on correct use of fertilizers and pesticides (	
	dosage)	
	To encourage more of horticulture crops as there is labour	
	problem.	
	Popularize Tur varieties for different seasons and also to	
	standardize the cost of production.	
	To adopt closer spacing in maize sowing.	

#### **PART II - DETAILS OF DISTRICT**

#### 2.1 Major farming systems

S. No	Farming system				
1	Rainfed: Ragi, Maize, Sorghum, Minor millets, Red gram, Black gram, Green gram, Bengal gram, Groundnut, Sunflower,				
	Coconut, Mango, Cotton, Onion				
2	Irrigation :(33%)				
	Flood irrigation: Rice, Sugarcane, Arecanut, Vegetables				
	Drip irrigation: Arecanut, Coconut, Pomegranate, Papaya, Sapota, Betel vine				
3	Enterprise: Poultry, Fishery, Dairy, Sericulture, Vermicomposting				
4	Cropping intensity: 122%				

The Taralabalu Krishi Vigyan Kendra is situated in Davanagere district. The district occupies a total geographical area of 5913.4 sq. km. It is spread over 6 taluks, 35 hoblies and 232 gram panchayaths. According to 2001 censes, the district comprises total population is 17,90,952, out of which 9,17,705 are male and 8,73,247 are female. The district is primarily agrarian in character and more than 75% of its population depending directly / indirectly on agriculture for their livelihood.

Davanagere district is at center of the state and lies in between latitude of the 75°.30' and 76°.30' and longitude of 13°.45' and 14°.50' with MSL of 602.5m. The average rainfall of the district is 644 mm. The variety of soil is medium to deep black and red sandy loam. The district is essentially Kharif region and majority Rabi crops will be taken up with the help of irrigation from Bhadra canal. The district comprises of three agro climatic zones of Karnataka given in section 2.2.

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

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

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

# 2.3 Soil type/s

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

# 2.4. Area, Production and Productivity of major crops cultivated in the district (2008-09)

S. No	Crop	Area (ha)	<b>Production (Metric tons)</b>	Productivity (kg/ha)
1	2	3	4	5
I	CEREALS	•		
1	Rice	62835	326742	5200
2	Jowar	17190	32976	1918
3	Bajra	549	384.3	700
4	Maize	175656	702978	4002
5	Ragi	15912	23845.5	1499
6	Wheat			
7	Navane	524	262	500
8	Save			
	<b>Total Cereals</b>	272666	1087188.2	3987

1	2	3	4	5
II	PULSES	<u>'</u>		
1	Redgram	8051	8074.6	1003
2	Blackgram	163	43.195	500
3	Horsegram	1125	956.25	850
4	Greengram	2123	955.35	450
5	Avare	1482	590.2	398
6	Cowpea	1385	595.55	430
7	Bengalgram			
	<b>Total Pulses</b>	14329	11215.145	783
	<b>Total Food crops</b>	286995	1098403.35	3827
III	OIL SEEDS			
1	Groundnut	16851	16063.7	953
2	Castor	666	628.704	944
3	Sesamum	1452	1089	750
4	Linseed			
5	Soybean	125		
6	Niger	598	158.47	265
7	Mustard	265	57.24	216
8	Sunflower	8569	8778.6	1024
9	Safflower			
	Total	28526	26775.714	939
IV	COMMERCIAL CROP			
1	Cotton	11013	15893.82	245
2	Sugarcane	5832	670680.00	115
3	Tobacco	130	71.5	550
	Total	16975	686645.32	910
	GRAND TOTAL	332496		9663

Source: Department of Agriculture, Davanagere.

# AREA UNDER HORTICULTURE CROPS IN THE DISTRICT (2008-09)

Crops	Area (in hectares)	Production (in tons)	Yield (tons/hectare)
1	2	3	4
		Fruit Crops	
Mango	2748.00	27040.00	9.84
Banana	2167.20	60075.00	27.72
Lemon	53.20	1252.00	23.53
Sweet orange	519.00	9411.00	18.13
Guava	16.00	335.00	20.94
Sapota	851.10	8898.00	10.45
Pomogranate	194.10	2101.00	10.82
Papaya	251.00	20160.00	80.32
Fig	5	62.50	12.50
	7	Vegetable Crops	
Tomato	1914.20	47270.00	24.69
Brinjal	549.40	13735.00	25.00
Sweet potato	16.00	208.00	13.00
Onion	3851.10	77022.00	20.00
Beans	125.80	1333.00	10.60
Green chilly	1255.2	13287.80	10.59
Cabbage	27.4	602.8	22.00
Knol-Khol	2.00	4.00	2.00
Cauli flower	10.00	180.00	18.00
Bhendi	333.80	2580.40	7.73
Radish	100.40	1084.80	10.80
Beetroot	19.10	343.80	18.00
Carrot	2.80	56.00	20.00
Capsicum	18.80	282.00	15.00
Cluster bean	11.20	78.40	7.00

1	2	3	4
	Leafy Vegetabl	es	
Menthi	10.40	32.00	3.08
Palak	7.00	70.00	10.00
Amaranthus	8.10	162.00	20.00
Curry leaves	25.20	180.80	7.17
	Ground Vegetab	oles	
Ash gourd	2.80	70.00	25.00
Snake gourd	8.00	132.50	16.56
Bitter gourd	55.20	432.10	7.83
Ridge gourd	63.00	504.00	8.00
Pumpkin	56.20	1656.00	29.47
Cucumber	223.00	3423.50	15.35
Little gourd	1.40	53.20	38.00
Gherkin	78.00	1.717.50	22.02
	Spice Crops		
Pepper	13.00	3.25	0.25
Cardamom	1.00	0.06	0.06
Ginger	38.00	410.00	10.70
Tamarind	143.80	717.50	4.99
Turmeric	16.40	124.90	7.62
Garlic	34.00	248.00	7.29
Coriander	32.00	46.50	1.45
Vanilla	77.00	139.40	1.81
	Garden/Plantation	Crops	
Coconut	17321.00	1990.14	0.11
Arecanut	25232.00	33202.90	1.32
Beetelvine	1068.30	22318.50	20.89
Cocoa	81.40	46.34	0.57
Oil Palm	72.00	804.00	11.17
Cashew	22.00	44.00	2.00

1	2	3	4							
	Commercial Flowers									
Aster	22.00	220.00	10.00							
Crossandra	54.80	274.00	5.00							
Marigold	304.40	3042.00	9.99							
Jasmine	255.44	345.70	2408.90							
Chrysanthamum	500.00	8700.00	15.00							
Rose	43.20	105.40	2.44							

Source: Department of Horticulture, Davanagere.

## 2.5. Weather data

Month	Rainfall (mm)	Tempe	Relative Humidity (%)	
		Maximum	Minimum	
April 2009	19.7	36.0	27.0	73.9
May 2009	151.5	35.0	23.0	76.1
June 2009	88.6	31.0	25.0	79.8
July 2099	136.8	31.5	22.0	81.3
August 2009	140.6	30.0	20.0	79.6
September 2009	114.5	30.0	22.0	82.3
October 2009	116.4			
November 2009	40.3			
December 2009	58.2			
January 2010	17.7			
February 2010	0.0			
March 2010	6.7			
Total				·

Source: Department of Agriculture, Davanagere.

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

Category	Population	Production	Productivity
Cattle			
Crossbred	292231		5-6 lts / day
Indigenous	57139		
Buffalo	210236		
Sheep			
Crossbred	120		
Indigenous	204789		
Goats			
Pigs			
Crossbred			
Indigenous	3100		
Rabbits	102		
Poultry	1520386		
Hens	-		
Desi	-		
Improved	-		
Ducks	-		
Turkey and others	-		

Category	Area (ha)	Production (tones)	Productivity (tones/ha)
Fish			
Marine			
Inland	10098	6600	1.5
Prawn			
Scampi			
Shrimp			

Department of Animal Science and Fisheries, Davanagere

## 2.6 A. Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
01	Davanagere	Kandagal	Kandagal Tholahunase Thurchaghatta	05	Coconut	Heavy incidence of mites and BHC     Improper nutrient management	<ul> <li>ICM, popularization of TNAU coconut tonic</li> <li>Release of Bio agents</li> </ul>
		Halebiseleri	Halebiseleri Belavanur Kurki	03	Paddy	<ul> <li>No biofertilizer</li> <li>Improper nutrient management</li> <li>Stem borer and BPH problem</li> <li>Indiscriminate use of pesticides</li> </ul>	<ul> <li>Seed treatment with biofertlizer (Azosprillum)</li> <li>Use of pheromone traps against stem borer</li> </ul>
		Chandranahalli	Chandranahalli	02	Maize	Closer spacing     Improper Nutrient management	Integrated crop management
					Drumstick	Less area in cultivation     Poor knowledge on use of drumstick as inter crop in Coconut garden	Popularization of Drumstick (var.Dhanraj) as intercrop in coconut gardens
		Anagodu	Anagodu	02	Brinjal	Shoot and fruit borer	• IPM
			Avaragere Hosa chikkanahalli Naganur Halebisleri	04	Paddy Sugarcane Cattle, Buffalo Sheep, Poultry	Low productivity	<ul> <li>Nutrition – Fodder scarcity</li> <li>Quality clean milk production</li> </ul>

Avaragere	Avaragere Kurki	03	Paddy Maize Dairy Mushroom production	<ul><li>Lower yield</li><li>Inefficient use of crop residue</li></ul>	Mushroom production by use of agricultural wastes
Avaragere	Basavangowda camp Mudahadadi Duggammanapete Bullapura	02	Tank Fisheries	<ul> <li>Low fish production per unit area (0.5 to 0.8 t/ha)</li> <li>Incomplete technical knowhow of aquaculture technology</li> <li>Lower income per unit area</li> </ul>	• Sustainable integrated fish farming with polyculture in farm ponds
Davanagere	Naganuru Halebisleri Avaragere	02	Livestock rearing	<ul> <li>Low milk production / Low quality milk production</li> <li>Infertility problems in cattle</li> <li>Foot and mouth disease and mastitis</li> </ul>	<ul><li>Feeding and breading</li><li>Disease control</li></ul>

02	Harihar	K.N. Halli	K.N. Halli Jigali Nittur	02	Coconut	<ul><li> Heavy incidence of mites</li><li> Poor quality nuts</li></ul>	Integrated crop management in coconuts
		Kondajji	Kempanahalli	01	Bhendi	Fruit borer	• IPM
		Kondajji	Kempanahalli	01	Brinjal	Shoot and fruit borer	• IPM
		Harihar Malebennur	K.N. halli Holesirigere Yelavatti Kenchanahalli	03	Tank Fisheries	<ul> <li>Low fish production per unit area (0.5 to 0.8 t/ha)</li> <li>Incomplete technical knowhow of aquaculture technology</li> <li>Lower income per unit area</li> </ul>	• Sustainable integrated fish farming with polyculture in farm ponds
03	Channagiri	Basavapattana	Harosagara Kotehal Tavarakere	03	Arecanut	<ul><li> Dropping of immature nuts</li><li> Nut splitting</li></ul>	<ul> <li>Integrated nutrient management in arecanut</li> <li>Promotion of green manure crops</li> </ul>
		Bommenahalli	Bommenahalli Gondhihosahalli	01	Maize	<ul> <li>Stem borer and downey mildew</li> <li>No micro nutrient (ZNSO<sub>4</sub>)</li> </ul>	Spacing management
					Banana	<ul> <li>Lower bunch weight due to improper micronutrient management</li> <li>Sigatoka leaf spot</li> </ul>	Integrated nutrient management with banana special in banana
		Santhebennure	Santhebennure Devarahalli	03	Chilli Tomato	<ul><li> Muruda complex</li><li> Dropping of flowers</li></ul>	• Integrated pest management
		Bommenahalli	Bommenahalli Garga	01	Cotton	<ul><li>Sucking pest</li><li>Leaf reddening and sqare drying</li></ul>	Bt hybrid
		Basavapatna	Basavaptna Harosagara Daginakatte	02	Arecanut	Hidimundige roga, Button shedding. Mites	IPM     Micronutrients spraying

04	04 Honnali Kenglahalli	Kenglahalli	Kenglahalli Yakkanahalli Kumbalur Arundi	03	Onion	<ul><li>Purple blotch disease</li><li>Poor yield</li></ul>	Production technology of purple blotch resistant variety Arka Kalyan in onion
		Taraganahalli	Taraganahalli Singitigere	01	Cotton	No organic manure	• IPM measures
		Taraganahalli	Taraganahalli	02	Arecanut	<ul><li> Dropping of nuts</li><li> Nut splitting</li></ul>	• ICM in Arecanut
				01	Jowar	Use of low yielding varieties	• ICM
				01	Livestock rearing	<ul> <li>Low milk production / Low quality milk production</li> <li>Infertility problems in cattle</li> <li>Foot and mouth disease and mastitis</li> </ul>	<ul><li>Feeding and breading</li><li>Disease control</li></ul>
05	Harapanahalli	Anjigere	Budihal Hulikatte Arasikere	01	Dry land Horticulture	<ul><li> Lower water table</li><li> More area in Rainfed</li></ul>	<ul> <li>Promoting dry land horticulture</li> <li>Soil and water conservation</li> </ul>
			Anjigere Budhihal U.D.Camp	03	Cotton	Improper spacing and seed rate	Higher production and productivity with good staple length
		Uchangidurga	UD camp Ananthanahalli	02	Navane	Use of local variety     No use of recommended dose of fertilizer	• ICM
			Birapura Koratikere	01	Same	<ul><li> Use of local varieties</li><li> Lower yield</li></ul>	• ICM

		1				Taralabala taloni Vigyan	Kendra, Davanagere
		Kondajji	Kenchanayakanahalli Vyasanathanda	03	Fisheries	Incomplete technical know- how of aquaculture technology	• Composite fish culture in farm ponds
			Beemanathanda			Lower income per unit area	
06	Jagalur	Bilchodu	Mallapura	02	Onion	Purple blotch diseases	Production technology
			Devikere				of HYV Arka kalyan
			Bilchodu				
					Dry land Horticulture	Lower water table	Soil and water
						More area in rainfed	conservation
							Promoting dry land horticulture
		Obalapura	Obalapura	01	Cotton	No RDF and micronutrients	• Use of growth regulators
			Hosakere			sprays	and micro nutrients
		Jagalur	Obalapura	01	Groundnut	Collar rot, root rot, leaf spot	Integrated pest and
			Jagalur			and leaf minor	disease management
			Bullanehalli			Use of low yielding variety	• Use of groundnut
			Marenahalli			No Gypsum and seed treatment	stripper and decorticator
			Koretekere			More time and labour for stripping and shelling	
			Bidarikere	02	Sunflower	Bud necrosis	• IPDM
						Clock spacing	• spacing
						No boran application	Micronutrient
		Bilchodu	Medikeranahalli	01	Chilli	Murda complex	• IPM
		Differiodu	ivicorci ananani	V1	Cinin	Improper pest and disease	11 1/1
						management	

## 2.7 Priority thrust areas

S.	Thrust area
No	Interested and management in Assessment Consent Towards and Chilli
01	Integrated crop management in Arecanut, Coconut, Tomato and Chilli
02	Micronutrient management in Banana
03	Dry land horticulture
04	Integrated nutrient management in Maize and Paddy
05	Integrated crop management in Cotton
06	Integrated pest and disease management in arecanut, groundnut, sunflower, chilli, brinjal and bhendi
07	Use of bio fertilizers and bio pesticides
08	Nutrition –Fodder scarcity
09	Quality clean milk production
10	Composite fish culture in inland water
11.	ICM in Navane, Same and Jawar

# PART III - TECHNICAL ACHIEVEMENTS

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

		OFT		FLD					
		1			2				
]	Number of OFTs	N	Sumber of farmers		Number of FLDs	ľ	Number of farmers		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
08	08	51	51	28	27	326	284		
		Training			Extension Activities				
		3		4					
N	lumber of Courses	Nui	nber of Participants	Number of activities Number of partic			nber of participants		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
99	119	2475	2763	750	770	-	5277		

Seed Pro	luction (Qtl.)	Planting ma	nterial (Nos.)
	5		6
Target	Achievement	Target	Achievement
24	56.45	3400	41700

	Livestock (No.)	Bi	io-products (Kg)
	7		8
Target	Achievement	Target	Achievement
10000 lt milk	8000 lt milk	-	Trichoderma -75 kg
Fisheries – 50 kg	51 kg		

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

			ons under taken t		Interventions									
S. No	Thrust area	Crop/ Enterprise	rise Problem  t • Block headed	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.)		apply of bio products
01	Integrated Crop Management	Coconut	Block headed caterpillar and mite damage     Poor quality nuts	Use of TNAU coconut tonic to strengthen coconut palms (Continued Assessment	-	01	-	-	03	-	-	-	-	-
		Onion	Purple blotch disease	-	Production technology of HYV Arka kalyan in onion	01	-	-	02	20 kg				Trichoderma- 0.25 kg
		Drumstick	Poor yields	-	Production technology of HYV Dhanraj drumstick in coconut gardens	01	-	-	02	250 g	-	-	-	-
		Navane	Use of local varieties and poor management	-	Production technology of high yielding Navane variety STA- 326	01	-	-	11	STA-326- 40 kg Fertilizer 17:17:17-100 kg Vermicompost- 5.5 q	-	-	-	-

		Same	• Use of local varieties	-	Proudction technology high yielding same variety OLM-203	01	-	-	06	OLM-203-40kg Fertlizer- 17:17:17- 100 kg Vermicomposts-	isiii Vigyuii	Kenara, De		ugere
		Jowar	• Use of local varieties low yield	-	Production technology in Rabi Jowar-M-35-	01	-	-	10	2.75 q. M-35-1-40 kg Urea- 20:20:0- Endosulfan-4 ltr				Trichoderma- 20 kg
02	Micro Nutrient Management	Banana	• Lower bunch weight	-	Use of micronutrient mixture banana special in Banana	02	-	-	12	-	-	-	-	-
03	Higher production and productivity with good staple length ICM	Cotton	<ul> <li>Improper spacing and higher seed rate</li> <li>Sucking pests</li> <li>Improper nutrient management</li> <li>No sprays of micro and macro nutrients</li> </ul>		•Integrated crop managemen t in MRC-7918 •ICM in MRC 6918 along with KNO3 spray	07	-	04	Field day- 2 Radio talk-1 TV annadhath -3	MRC-7918-0.22 Bhendi Seeds- 0.25	-	-		-
04	ICM	Maize	<ul> <li>Closer spacing</li> <li>Improper nutrient management</li> <li>Stem borer and downey mildew</li> <li>No micronutrient s (ZnSo<sub>4</sub>)</li> </ul>	Assessment of plant geometry in maize		03	01	02		Private hybrid seeds-0.25	-	-	-	-

										Taraiabaiu N	iloni vigyan	Renara, De	avan	
05	INM	Tomato	• Improper nutrition fruit cracking	1	Application of vegetable special in tomato	01	-	-	11	Vegetable special -24 kg MOP- 100 kg Urea – 175 kg SSP - 470 kg	-	-		VAM: 1 kg PSB : 1 kg
06	IPM	Coconut	<ul><li> Mites incidence</li><li> Poor quality of nuts</li><li> Lower yield</li></ul>	-	Integrated management of eriophid mite in coconut	02	-	-	10	Nimbicidine	-	-		Goniozus nephentidex :50/palm
07	IPM	Redgram	<ul> <li>No seed treatment</li> <li>Use of local variety</li> <li>Pod borer and wilt</li> </ul>	-	Integrated pest management in redgram	01	-	-	10	BRG-1 Seeds-150 kg Neem oil-15 lt Profenophos-10 lt Quinolphos-15 lt	-	-	-	PSB-20 kg Rhizobium-5 kg NPV-2500 LF Trichoderma- 10 kg
08	ICM	Redgram	<ul> <li>To achieve uniform crop stand</li> <li>Better establishmen t of plants</li> </ul>	Enhancing the productivit y in redgram production system	-	01	-	-	03	BRG-1 seeds 30 kg	-	-	-	-
09	IPDM	Sunflower	<ul> <li>Bud necrosis and powdery mildew</li> <li>Close spacing</li> </ul>	-	Integrated crop management in powdery mildew resistant hybrid KBSH 53	02	15			KBSH 53-40 kg				

10	IPM	Groundnut	• Leaf spot, collar rot & leaf minor		ICM in leaf spot resistance variety : GPBD-4		16			GPBD-4 5.1qt			
11	IPM	Brinjal	• Shoot and fruit borer		Integrated managemen t of shoot and fruit borer in brinjal	01	13			Wota traps-48 Chloropyriphos 14 lt Spark -5 lt			Trichoderm-20 kg Pongamia soap - 24 kg
12	IPM	Bhendi	• Shoot and fruit borer	Assessmen t of integrated manageme nt practices of fruit borer in bhendi	J	01	10			Bhendi-1/2 kg Indaxicarb - 125 ml Neem cake- 12.5 kg			Pongamia soap- 3 kg
13	IPM	Chilli	Murda complex		Integrated managemen t of murda complex in chilli	01	12			Blitox- 1 kg Confidor – 4000 ml Acephate-3 kg Dicofol-61	Trichoderm- 1.25 kg		
14	IPM	Arecanut	Hidimundige		Integrated managemen t of hidimundige in arecanut	01	14			DAP- 100 kg K - 400 kg Boran- 6 kg Blitox -2.5 kg Rogar -2.5 lt			Trichoderma-9.3 kg
15	ICM	Rice	<ul> <li>Improper nutrient management</li> <li>Improper pest and disease management</li> </ul>	-	Integrated crop managemen t in rice	06	-	-	13	ZnSO <sub>4</sub> -60 kg Funnel trap-48 Endosalfan-12 It Neem oil – 3 lt	-	-	Azospirillum:6 kg Vermicompost:5 qt Trichogramma Japonisum: 50000/ ha

	1		T	1	1	1	1		1		raiadaiu Krisni	vigyanı	Criura, Dav	variagere
16	IPM	Sunflower	• Pest management	-	Evaluation of different methods for managemen t of powdery mildew in sunflower	01	11			Sunflower NK -275 seeds 0.5 kg Calixin-1.5 lt Carbendizim- 5.75 kg Hexaconazol-6 lt				
17	- Composite fish farming	Fisheries	- Lower fish production and productivity		Composite fish culture in farm ponds using advanced carp fingerlings	05		01	11	Fish fingerlings – 4000 Vitamin – mineral mix – 10 kg				
18	- Fish species selection	Fisheries	- General Common Carp attains early maturity and gains lower body weight	1	Growth assessment of Common carp and Amur carp in farm ponds	01			08	Fish fingerlings – 1200 Vitamin – mineral mix – 12 kg				
19	- Fish production and manageme nt	Fisheries	- Aqua culture production is limited in the district compared to the potential	ł	Fish culture in concrete tanks using advanced fingerlings	01			07	Fish fingerlings – 500 Vitamin – mineral mix – 9 kg				
20	Mushroom production	Mushroom	Lower yield     Inefficient     use of     agricultural     wastes	Assessmen t of oyster mushroom production by locally available agricultura 1 wastes	-	01	-	-	03	Oyster mushroom spawn	-	-	-	_

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise		No. of programmes conducted							
			Crop/enterprise	OFT	FLD	Training	Others (Specify)					
1	2	3	4	5	6	7	8					
01	Use of TNAU Coconut tonic in coconut	TNAU, Coimbatore	Coconut	01	-	01	-					
02	Production technology of Arka kalyan in onion	IIHR, Bangalore	Onion	-	01	01	-					
03	Production technology of 'Dhanraj' variety of drumstick in coconut	TNAU, Coimbatore	Coconut	-	01	01	-					
04	Use of micronutrient mixture banana	IIHR, Bangalore	Banana	-	01	02	01					
05	Integrated crop management in MRC-7918	UAS and MNC	Bt Cotton	-	01	Farmers-7 Extension	Field day-2 Radiotalk-1					
06	Integrated crop management in MRC 6918 along with KNO <sub>3</sub>	-	Bt Cotton	-	01	functionaries -4	TV Programme-03					
07	Assessment of plant geometry in maize	UAS, Bangalore	Hybrid Maize	01	-	03	-					
08	Application of vegetable special in tomato	IIHR, Bangalore	Tomato	-	01	01	-					
09	Integrated management of eriophid mite in coconut		Coconut	-	01	02	-					
10	Integrated pest management in redgram	UAS, Bangalore	Redgram	-	01	01	-					
11	Enhancing the productivity in redgram production system	UAS, Dharwad	Redgam	01	-	01	-					
12	Integrated crop management in rice	UAS, Bangalore	Rice	-	01	06.	-					
13	Integrated crop management in leaf spot resistant groundnut variety GPBD-4	UAS, Bangalore	Groundnut	-	01	01	Field day-01					
14	Integrated crop management in powdery mildew resistant sunflower hybrid KBSH-53	UAS, Bangalore	Sunflower	-	01	02	Field day-01					
15	Integrated management of hidimundige in arecanut	UAS, Bangalore	Arecanut	-	01	01	-					
16	Integrated management of murda complex in chilli	UAS, Bangalore	Chilli	-	01	01	-					

						araiabaia Krisiii V	igyan Kenura, Davanagere
17	Integrated management of shoot and fruit borer in brinjal	IIHR	Brinjal	-	01	01	-
18	Assessment of integrated management practices of fruit borer in bhendi	IIHR, Bangalore	Bhendi	-	-	01	-
19	Evaluation of different methods for management of powdery mildew in sunflower	UAS, Bangalore	Sunflower	-	-	01	-
20	Production technology of high yielding navane variety STA-326	UAS, Bangalore	Navane (STA-326)	-	01	01	-
21	Production technology of high yielding same variety OLM-203	UAS, Bangalore	Same (OLM-203)	-	01	01	-
22	ICM in rabi jowar M-35-1	UAS, Dharwad	Jowar (M-35-1)	-	01	01	-
23	Composite fish culture in farm ponds using advanced carp fingerlings	CIFA, Bhuvaneshwar	Fisheries		01	05	
24	Growth assessment of Common carp and Amur carp in farm ponds	KVAFSU, Bidar	Fisheries		01	02	
25	Fish culture in concrete tanks using advanced fingerlings	UAS, Bangalore	Fisheries		01	01	
26	Assessment of oyster mushroom production by locally available agricultural watses	UAS, Bangalore	Mushroom	01		01	

3.B2 contd..

							No. of farn	iers covere							
	(	OFT			<b>F</b> ]	L <b>D</b>			Tra	ining			Others	(Specify)	
Genera	ıl	SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
05	01	02	-	-	-	-	-	09	01	-	-	-	•	-	-
-	-	-	-	09	-	-	01	04	-	-	01	-	•	-	-
-	-	-	-	09	-	02	-	09	01	-	-	-	-	-	-
-	-	-	-	08	-	04	-	41	-	04	-	78	-	31	-
64	-	01	-	34	-	16	-	164	48	38	08				
-	-	-	-	2	=	3	5	6	1	7	4	-	-	-	-
-	-	-	-	12	2	6	-	13	2	5	-	-	-	-	-
-	-	-	-	5	=	-	-	12	-	-	-	-	-	-	-
-	-	-	-	5	-	3	2	10	-	-	2	-	-	-	-
-	-	-	-	5	2	3	-	8	2	4	1	-	-	-	-
3	1	1	-	_	-	-	-	5	3	1	-	-	-	-	-
3	-	2	-	-	-	-	-	4	2	-	-	=	-	-	-
	-	-	-	2	-	3	2	5	-	12	-	-	-	-	-
-	-	-	-	5	1	1	1	5	2	9	1	-	-	-	-
-	-	-	-	8	2	2	1	8	2	3	0	-	-	-	-
-	-	-	-												
				03		02		62	13	15					
				02		01		04		02					
				04		01		08							
7	01	02						07	02	02	01				

# PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management								01		01
Varietal Evaluation										
Integrated Pest Management					01					01
Integrated Crop Management with spacing	01	-	01	-	-	-	-	-	-	-
Integrated Disease Management		01			01					02
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation					01					01
Total										

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

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

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

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

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

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

# 4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Area (ha)
Integrated Nutrient Management	Coconut	Use of TNAU Coconut tonic to strengthen coconut palms	08	240 palms
Varietal Evaluation				
Integrated Pest Management	Bhendi	Assessment of integrated pest management of practices of fruit borer in bhendi	05	1.5
Integrated Crop Management with different spacing	Maize	Assessment of the plant geometry in hybrid maize	05	2.5
<u> </u>	Redgram	Enhancing the productivity in redgram production system	05	02
Integrated Disease Management				
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Value addition				
Drudgery Reduction				
Storage Technique				
Mushroom cultivation	Mushroom	Assessment of oyster mushroom production by locally available agricultural wastes	10	
Chemical evaluation	Sunflower	Evaluation of different methods for management of powdery mildew in sunflower	10	0.8
Total				

# 4.B.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Area (ha)
Integrated Nutrient Management				
Varietal Evaluation				
Integrated Pest Management				
Integrated Crop Management				
Integrated Disease Management				
Small Scale Income Generation Enterprises				
Sman Searc meonic Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Prov. M. Prov. Pro				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Value addition				
Drudgery Reduction				
2. augory reduction				
Storage Technique				
Mushroom cultivation				
m . 1				
Total				

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Evaluation of breeds			
Nutrition management			
Disease management			
Value addition			
Production and management			
Feed and fodder	Lactating Animals	Supplementation of Ragi grain as locally available energy source along with AZOLLA in lactating cows	
Small scale income generating enterprises			
Total			

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

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

# 4.C1. Results of Technologies Assessed

## **Results of On Farm Trial**

#### 1. Coconut

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Coconut	Irrigated	Higher pest and disease incidence due to lack of resistance by the palms resulted in poor yield	Use of TNAU Coconut tonic to strengthen coconut palms (Continued Assessment)	08	TNAU coconut nutritional tonic			Method demonstrati on on root feeding with coconut palms @ 200 m/palm has been done     Second dosage given in the month of March 10	Notice d good crop stand Newly emerg ed leaves are health y Need to repeat best for 3- 4 years		-

#### Contd..

Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 (Farmer's practice) Application of complex fertilizer (17 all) @ 1508 / plant	-	-	-	-
Technology option 2 50 kg FYM, 500:320:1200 g NPK/palm/year 05 kg Neem cake / palm/ year, 50 g borax/palm/year Econumplus 1 % (10 ml/palm, 3 times / year) 500 g MgSO <sub>4</sub> /palm/year				
Technology option 3 50 kg FYM 500:320:1200 g NPK / palm/year 5 kg Neem cake / palm / year Nutritional tonic (200 ml / plant-twice a year at 6 monthly interval				

2. Redgram

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 done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Redgram	Rainfed	To achieve uniform stand and better establishment of plants	"Enhancing the productivity in redgram production system"	05	Farmers practice:  Monocropping	Plant height (cm)	156 cm 51.4 cm	• There is no clear cut difference between the	• One more attempt of the same technolo	-	-
		or plants	system		Close spacing	No. of pods per plant	3.3 cm	technologi es due to heavy rainfall	gy was expected from farmers		
					Technology option-1:  Direct sowing of redgram seeds (90 cm x 15 cm)	Yield (q/ha)	16.9 53.6 3.4				
					Technology option-2: Transplanting of 40 days old crop which raised in polythens bags		175 52.6 3.3				

Technology Assessed	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
Farmers practice: Monocripping and close spacing	3.3	q/ha	7100-00	1.91
Technology option 1 Direct sowing of redgram seeds (90 cm x 15 cm)	3.4	q/ha	7750-00	2.03
Technology option 2 Transplanting of 40 days old crop which raised in polythene bags	3.3	q/ha	7450-00	2.01
Technology option 3				

3. Dairying

Enterprise	Farming Situation	Problem definition	Title of OFT	No. of Trials	Technology Assessed	Parameters of Assessment	Data on the parameters	Results of Assessment
1	2	3	4	5	6	7	8	9
Dairying	Intensive farming system	Dairy animals lack energy source for their maintenance and production	Supplementation of Ragi grain as a locally available energy source along with Azolla for Dairy animals	05	Feeding ragi grain as energy source and Azolla as a protein supplement	Milk yield  LMR  Cost of feeding	Increased by 20 %  1.028  Rs. 3-4 less/l of milk	Milk yield in dairy animals is increased by 20 % with LMR of 1.028. There is a reduction in production cost of milk. Voluntary intake of Azolla-good

Feedback from farmer	Any refinement done	Justification for refinement	Technology Assessed	Production	Unit of measure	Net return (profit) in Rs. / unit	BC ratio
10	11	12	13	14	15	16	17
Shown interest in feeding Azolla to	-	-	1. Farmer's practice (T <sub>o</sub> )	Milk	Liters/day	2-3 / 1	1.3
dairy animals. Ragi grain as a			2. Technology option(T <sub>1</sub> )	Milk	Liters/day	4/1	1.8
energy source is found to be costlier now.			3. Technology option-(T <sub>2</sub> )	Milk	Liters/day	6-7 / 1	2.0

#### 4. Assessment in Sunflower

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
1	2	3	4	5	6	7	8	9	10
Sunflower	Rainfed	Lower productivity due	Evaluation of different	05	Farmers practice: Spraying with Dathane M-45	% Disease incidence	28.0	Timely spray with calixin	Timely spray with correct
		to higher incidence of	methods for management of		(2g/L)	Yield (q/ha)	9.10	reduces powdery	chemical reduces
		powdery mildew	powdery mildew in sunflower		<b>Technology option 1:</b> Spraying with Bavistin (1g/L)		14.0	mildew and gives higher yield.	powdery mildew incidence in sunflower
							14.4		
					Technology option 2: Spraying with Hexaconajol (1ml/L)	-	13.0		
					(11111/2)		14.2		
					<b>Technology option 3:</b> Spraying with calaxin (1ml/L)		7.0		
							15.9		

Any refinement done	Justification for refinement	Technology Assessed / Refined	Production per unit (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
		Farmers practice: Spraying with Dathane M-45 (2g/L)	9.10	3760/-	1.18
		<b>Technology option 1:</b> Spraying with Bavistin (1g/L)	14.4	18690/-	1.99
		Technology option 2: Spraying with Hexaconajol (1ml/L)	14.2	18020/-	1.95
		Technology option 3: Spraying with calaxin (1ml/L)	15.9	22840/-	2.23

#### 5. Assessment in Bhendi

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
1	2	3	4	5	6	7	8	9	10
Bhendi	Irrigated	Low yield due to higher incidence of fruit borer	Assessment of integrated management practices of fruit borer in bhendi	05	Farmers practice: Endosulfan spray (3ml/l)  Technology option 1: Carbaryl spray (4g/l)  Technology option 2: Collection & destruction of affected fruits	No. of fruits per plant % incidence of fruit borer Yield (t/ha)	11  28  3.1 t/ha  16  10  7.0 t/ha  17  2.0	Timely and regular fallow of IPM practices results in reduced fruit borer incidence	Manual collection, neem cake and neem soap application are ecofriendly practices results in reduced pest attack
					Neen cake application 250kg/ha Neem soap spray1% (10g/l)		8.1 t/ha		
					Indaxicarb spray 14.5 SC (0.5ml/l)				

Any refinement done	Justification for refinement	Technology Assessed / Refined	Production per unit (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
		Farmers practice: Endosulfan spray (3m/l)	3.1	31000	1.46
		Technology option 1: Carbaryl spray (4g/l)	7.0	70000	2.24
		Technology option 2: Collection & destruction of affected fruits Neen cake application 250kg/ha Neem soap spray1% (10g/l) Indaxicarb spray 14.5 SC (0.5ml/l)	8.1	81000	2.56

# **6.** Assessment in Plant Geometry in Maize

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
1	2	3	4	5	6	7	8	9	10
Maize	Rainfed	Low yield and no proper spacing	Plant geometry in Maize	05	Farmers practice: 45 X 20 cm	Plant ht No.Rows /Cob	169.7 14.6	Closer spacing seed rate is high and yields are low in FP	Low rainfall at early stages and heavy rainfall
						yield (/ ha)	47	composed to other two	thought the crop period
					Technology option 1: 60 x 30 cm	Plant ht.	172.36	options. Wider spacing 60 X 30 cm with	did not permit for weeding.
						No.Rows /Cob	15.2	better aeration and reduce pest and diseases	
						yield (/ ha)	55.68	incidence	
					Technology option 2: 45 X 30 cm UAS (Dharwad)	Plant ht.	172.26		
					75 X 50 cm C/15 (Dilai wati)	No.Rows /Cob	15.0		
						yield (/ ha)	51.48		

Any refinement done	Justification for refinement	Technology Assessed / Refined	Production per unit (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
		Farmers practice:1 45 X 20 cm	47.00	20550.00	2.39
		<b>Technology option 2:</b> 60 x 30 cm, UAS Bangalore)	52.9	25075.00	2.71
		Technology option 3: 45 X 30 cm UAS (Dharwad)	52.1	24700.00	2.69

Price: Rs. 750/ q.

7. Assessment in Oyster mushroom

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	
1	2	3	4	5	6	7	8	9	10	
Mushroom		Inefficient use of crop residue	Assessment of oyster	oyster mushroom production by	Farmers practice: Use of paddy straw	Mushroom yield (Unit / Kg spwan)	38	Mushroom yield	Paddy straw yields more.	
			mushroom production by locally available wastes			Quality	Similar in all the treatments	production is more in paddy	Agriculture wastes will be efficiently	
						Colour	Similar in all the treatments	straw as compared to other two raw	utilized	
					Taste	Similar in all the treatments	materials			
						Size of button	Big			
					Technology option 1: Use of sugarcane trash	Mushroom yield (Unit / Kg spwan)	30			
						Quality	Similar in all the treatments			
							Similar in all the treatments			
						Taste	Similar in all the treatments			
						Size of button	Medium			
					Technology option 2: Use of arecanut husk	Mushroom yield (Unit / Kg spwan)	28			
						Quality	Similar in all the treatments			
						Colour	Similar in all the treatments			
						Taste	Similar in all the treatments			
						Size of button	Medium to small			

Any refinement done	Justification for refinement	Technology Assessed / Refined	Production (kg)	Unit yield /kg spawn	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16	17
		Farmers practice: Use of paddy straw	38	9.5	1330	2.4
		Technology option 1: Use of sugarcane trash	30	7.5	850	1.9
		Technology option 2: Use of arecanut husk	28	7.0	730	1.8

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

## I. Use of TNAU coconut tonic to strengthen coconut palms:

- 1 **Title of Technology Assessed**: Use of TNAU coconut tonic to strengthen coconut palms (Continued Assessment)
- 2 **Problem Definition**: Higher pest and disease incidence due to lack of resistance by the palms resulted in poor yield.
- 3 **Details of technologies selected for assessment**: Coconut nutritional tonic (200 ml /palm- twice a year at 6 months interval)
- 4 **Source of technology**: TNAU, Coimbatore
- 5 **Production system and thematic area**: Irrigated and improved production technology
- 6 Performance of the Technology with performance indicators: -
- 7. **Feedback, matrix scoring of various technology parameters done through farmer's** participation / other scoring techniques : Noticed good response from farmers. As it is perrirrial crop need to repeat technology for 2 or 3 years
- 8 Final recommendation for micro level situation: -
- 9 Constraints identified and feedback for research: 1. Selection of pencil taiceness roof
  - 2. Root feeding in too much laborious
- 10 **Process of farmers participation and their reaction**: Good participation from the farmers

## **II.** Plant geometry in hybrid maize

- 1 **Title of Technology Assessed**: Plant geometry in hybrid maize
- 2 **Problem Definition**: Low yield and improper spacing
- 3 Details of technologies selected for assessment:

Technology	Technology details
Technology Option -1 (Farmers Practice)	45 cm X 20 cm
Technology Option-2	60 cm X 30 cm
Technology Option-3	45 cm X 30 cm

- 4 **Source of technology**: Farmers Practice, UAS, Bangalore, UAS, Dharwad
- 5 **Production system and thematic area**: Maize mainly green in rainfed and area is mainly focused on spacing. Seed rate and inturn higher productivity.
- 6 Performance of the Technology with performance indicators:

Sl.	Name of farmer	Name of									
No.		Village									
01	Mr. Sangameshwara	Chandranahalli	170.1	15	46.2	171.0	15	51.5	172.0	15	52.5
02	Sri. Siddaraju	Chandranahalli	169.0	14	48.0	172.0	16	53.5	171.5	15	51.4
03	Sri Vijayakumar	Davanagere	170.0	15	46.8	172.5	16	53.8	173.0	16	52.5
04	Mrs Nirmala	Bomenahalli	Viciated -	- Conti	nuous rainfall a	t vegetative stag	ge did not allow	proper weedin	g.	•	
05	Mr. Omkarappa	Gondhihosalli									
		Average	169.7	14.6	47.0	171.8	15.6	52.9	172.1	15.33	52.1

- 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:

### III. Enhancing the productivity in redgram production system

- Title of Technology Assessed : Enhancing the productivity in redgram production system
- 2 **Problem Definition**: To achieve uniform stand and better establishment of plants
- 3 Details of technologies selected for assessment:

Categories	Source of technology	Details
Technology Option -1	Farmers practices	Monocropping: Close spacing
Technology Option-2	UAS, Bangalore	Direct sowing of redgram seeds ( 90cm x 15 cm)
Technology Option-3	UAS, Dharwad	Transplanting of 40 days old crop which raised in polythens bags

- 5 **Production system and thematic area**: Rainfed: Optimum plant population and uniform growth
- 6 **Performance of the Technology with performance indicators**: Plant height (cm): No. of pods per plant; yield (q/ha)
- 7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques**: One more attempt of the same technology was expected from farmers.
- Final recommendation for micro level situation: The average yield of redgram has been reduced / affected due to heavy rainfall. There are no clear cut differences between the three technologies. So, it is difficult to recommend for micro level situation.
- 9 **Constraints identified and feedback for research**: Assessment of technology was affected due to heavy rainfall and one more attempt is required
- Process of farmers participation and their reaction: Initially farmers were interested in the technology but, due to heavy rainfall crop response was not good. Farmers interested in continuing the same in next year.

# IV. Evaluation of different methods for management of powdery mildew in sunflower

1) **Production system:** Rainfed

2) Problem Definition: Lower yield due to higher incidence of powdery mildew in sunflower

3) Title of the Technology Assessed: Evaluation of different methods for management of powdery mildew in sunflower

4) Thematic area: Disease management

5) Details of technologies for assessment/refinement

Category	Source of Technology	Technology details
Technology Option 1	Farmers practice	Spraying with Dathane M-45 (2g/L)
Technology Option 2	UAS (B)	Spraying with Bavistin (1g/L)
Technology Option 3	UAS (B)	Spraying with Hexaconazol (1ml/L)
Technology Option 4	UAS (B)	Spraying with Calixin (1ml/L)

6. **Production system and thematic area:** Sunflower and disease management.

7. Raw data about the performance of the Technology assessed / refined with performance indicators

		Data on the performance indicators of the technology as						hnology asse	sessed / refined			
Farmer No.	Name of the farmer	Name of the Village	Techno Optio		Technolog Option 2	y	Technology Option 3		Technology Option 4			
			% Disease	Yield (q/ha)	% Disease	Yield (q/ha)	% Disease	Yield (q/ha)	% Disease	Yield (q/ha)		
1	Chandrappa		30.0	9.5	12.0	14.0	13.0	1.3	7.0	16.6		
2	Tippesha		28.0	8.9	16.0	14.3	14.0	13.8	5.0	15.6		
3	Kenchappa	Bidarekere	29.0	9.7	15.0	13.8	13.0	14.1	9.0	15.8		
4	Revanna		26.0	8.6	13.0	15.2	14.0	14.9	8.0	16.4		
5	Ravi		27.0	8.8	14.0	13.7	12.0	13.9	6.0	15.1		
	1	Average	28.0	9.1	14.0	14.4	13.0	14.2	7.0	15.9		

- 8. Final recommendation for micro level situation: Regular and timely spray with correct chemical reduces powdery mildew incidence and gives higher yield
- 9. Constraints identified and feedback for research: Nil
- 10. Process of farmers' participation and their reaction: Farmers feels happiness over the technology tested and noticed increased yield. Spray with calaxin effectively reduces powdery mildew and spray with hexaconazol reduces both rest and powdery mildew in sunflower.

## V. Assessment of integrated management of fruit borer in bhendi

1) Production system: Irrigated

2) Problem Definition: Higher incidence of fruit borer in bhendi

3) Title of the Technology Assessed: Assessment of integrated management of fruit borer in bhendi

4) Thematic area: Integrated pest management

5) Details of technologies for assessment/refinement

Category	Source of Technology	Technology details
Technology Option 1	Farmers practice	Endosulfan spray (3ml/l)
Technology Option 2	POP, UAS (B)	Carbaryl spray (4g/l)
Technology Option 3	IIHR, Bangalore	Collection & destruction of affected fruits
		Neen cake application 250kg/ha
		Spray with neem soap 1% (10g/l)
		Spray with indaxicarb 14.5 SC (0.5ml/l)

6) Production system and thematic area: Irrigated and Integrated pest management.

7) Raw data about the performance of the Technology assessed / refined with performance indicators

				Data on the performance indicators of the technol					assessed / refined					
Farmer	Name of the farmer	Name of the	Techno	ology Option	1	Techno	ology Option	2	Techn	ology Option	n 3			
No.		Village	No. of fruits/plant	% incidence of fruit borer	Yield (t/ha)	No. of fruits/plant	% incidence of fruit borer	Yield (t/ha)	No. of fruits/plant	% incidence of fruit borer	Yield (t/ha)			
1	Ningappa		12	25	3.0	15	10	7.0	16	3.0	8.6			
2	Yogeshwar		11	30	2.7	18	12	6.8	18	2.0	8.3			
3	Shivashankar	Kempanahally	09	27	2.8	14	10	7.2	18	-	7.9			
4	Nagaraju		13	30	3.4	16	08	6.9	17	3.0	8.0			
5	Siddesh	-	10	28	3.6	17	10	7.1	17	2.0	7.7			
	1	Average	11	28	3.1	16	10	7.0	17	2.0	8.1			

- 8) Final recommendation for micro level situation: Regular fallow of integrated management practices reduces the incidence of fruit borer there by results in higher yield and net returns.
- 9) Constraints identified and feedback for research: Nil
- 10) Process of farmers participation and their reaction: Farmers feels happiness over the technologies like neem soap spray, manual collection and neem cake application and they expressed that these are ecofriendly practices reduces fruit borer incidence.

# **Dairying:**

# VI. Feeding Ragi grain as a source of energy along with Azolla to milch cows

1.	Title of Technology assessed:	Feeding Ragi grain as a source of energy along with Azolla to milch cows
2.	Problem definition:	Lack of energy in lactating cows-the most limiting nutrient in Dairy animals
3.	Details of technologies selected for assessment:	Feeding of locally available ragi grain as energy source along with Azolla a protein and vitamins supplement
4.	Source of Technology:	National Institute of Animal Nutrition and Physiology, Bangalore
5.	Production system & Thematic: area	Individual animal rearing by farmers, Nutrition Management
6.	Performance of technology with: performance indicators	Feeding Ragi grain (1 kg/day) and Azolla (2 kg $/$ day) has increased milk yield in animals
7.	Final recommendation for micro: level situation	Azolla along with any cereal grain available at cheaper price can be used for increasing production in dairy animals
8.	Constraints identified & feed back: for researcher	Now a days cereals are not available at cheaper cost
9.	Process of Farmers participation: and their reaction	Farmers have actively involved in the programme. Shown interest in constructing Azolla pond as it is giving good quality feeding stuff in quick time

## VII. Mushroom production

1. **Title of Technology assessed:** Assessment of oyster mushroom production by locally available agricultural watses

2. **Problem definition:** Disposal of agricultural wastes

3. Details of technologies selected for assessment:

Use of arecanut husk

4. Source of Technology:

UAS, Bangalore

5. Production system & Thematic: area

Agricultural wastes management

6. Performance of technology with: performance indicators

7. Final recommendation for micro: level situation

Paddy straw is still a better raw material for mushroom production. Sugarcane straw and arecanut husk can

also be used depending on the availability

8. Constraints identified & feed back:

for researcher

9.

Training and group meetings.

Process of Farmers participation: and their reaction

All the three raw materials for production of oyster mushroom were liked by farmers. Agricultural wastes

can be effectively managed.

# 4.D1. Results of Technologies Refined

#### **Results of On Farm Trial**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined t	Data on the parameter	Results of refinement	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12

#### Contd..

Technology Refined	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 (Farmer's practice)				
Technology option 2				
Technology option 3				

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

- 1. Title of Technology refined
- 2 Problem Definition
- 3 Details of technologies selected for refinement
- 4 Source of technology
- 5 Production system and thematic area
- 6 Performance of the Technology with performance indicators
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Closer spacing seed rate is high and yield are low in FP compared to other two options wider spacing (60X30) with better aeration and reduce pest and diseases incidence.
- Final recommendation for micro level situation: The OFT should be repeated at least for 3 years, so that we can make some recommendations. When crop is at 30 days old long dry spell of 12 days observed and afterwards heavy rainfall upto 90 days after sowing.
- 9 Constraints identified and feedback for research: Nill
- 10 Process of farmers participation and their reaction: Farmers actively participated and they expressed that yield levels should be increased with minimum inputs.

# PART V - FRONTLINE DEMONSTRATIONS

## 5.A. Summary of FLDs implemented during 2009-10

Sl. No.		Farming Situation			Season and Year	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (	ha)		o. of farme emonstrati		Reasons for shortfall in achieveme nt
									Proposed	Actua l	SC/S T	Others	Total			
01	Oilseeds															
		Irrigated	Kharif- 2009	Groundnut	GPBD-4	-	ICM	Integrated crop management in leaf spot resistant groundnut variety GPBD-4	05	05	8	3	11			
		Irrigated	Rabi/S ummer 2009	Sunflower	-	KBS H-53	ICM	ICM in powdery mildew resistant sunflower hybrid KBSH-53	10	08	4	16	20			
02	Pulses	Rainfed	Kharif- 2009	Redgram	Maruti		ICM	Integrated crop management in redgram	10	10	11	14	25	Heavy rainfall		

03	Cereals	Irrigated Rainfed	Kharif- 2009 Rabi/S	Rice	M-35-1	Bpt Sona	ICM ICM	Integrated crop management in rice ICM	06	06	03	12	15	_
			ummer 2009- 10	Jowai						00	03	10		
	Millets	Rainfed	Kharif -2009	Navane	STA-326	-	ICM	Production technology of high yielding navane variety (STA-326)	05	04	01	06	07	Shortage of seeds
		Rainfed	Kharif -2009	Same	OLM-203	-	ICM	Production technology of high yilding same variety (OLM-203)	05	04	02	06	08	Shortage of seeds
	Vegetables	Rainfed	Kharif 2009- 10	Onion	Arka kalyan	-	Producti on technolo gy	Purple blotch disease resistant variety Arka kalyan	5.0	5.0	01	09	10	Crop destroye d at one months old because of heavy rain
		Irrigated	Kharif 2009- 10	Drumstick	Dhanraja	-	Producti on technolo gy	Production technology of HYV Dhanraj in coconut gardens	5.0	5.0	02	09	11	Crop is at 4 months old

Vegetables	Irrigated	Kharif 2009	Tomato		US Agri 618	INM	Application of vegetable special in tomato	02	02	02	08	10	
	Irrigated	Kharif 2009	Chilli	U S Agri 611 (Mallika)	-	IDM	Integrated management of murda complex in chilli	05	05	5	5	10	
	Irrigated	Rabi/ Summer 2009	Brinjal	-	M-11	IPM	Integrated management of shoot and fruit borer in brinjal	04	04	3	7	10	
Flowers													
Ornamental													
Fruit	Irrigated	Kharif 2009- 10	Banana	Grandn ine Yelakki	-	Integrate d nutrient managem ent	Use of micronutrient mixture banana special	8.0	8.0	04	08	12	
Spices and condiments													
Commercial	Rainfed	Kharif 2009- 10	Cotton	-	MRC - 7918	Integrated crop managemen t	• Integrated crop management in MRC-7918	20	22	32	22	55	
Medicinal													
and													
aromatic	T 1	771 10						0.2	0.2		1.0	10	
Fodder	irrigated	-2009	Napier	Co-3	-	Productio n and yield	Variety and ICM	02	02	-	10	10	
	Flowers  Ornamental  Fruit  Spices and condiments  Commercial  Medicinal and aromatic	Irrigated   Irrigated	Irrigated Kharif 2009  Irrigated Rabi/ Summer 2009  Flowers  Ornamental  Fruit Irrigated Kharif 2009-10  Spices and condiments  Commercial Rainfed Kharif 2009-10  Medicinal and aromatic Irrigated Kharif 2009-10	Irrigated Kharif 2009  Irrigated Rabi/ Summer 2009  Flowers  Ornamental  Fruit Irrigated Kharif 2009- 10  Spices and condiments  Commercial Rainfed Kharif 2009- 10  Medicinal and aromatic  Irrigated Kharif 2009- 10  Napier	Irrigated   Kharif 2009   Chilli   U S Agri 611 (Mallika)			Irrigated   Kharif 2009   Chilli U S Agri 618   Irrigated management of murda complex in chilli Integrated management of murda complex in chilli Integrated management of shoot and fruit borer in brinjal	Irrigated   Kharif 2009   Chilli   U S Agri 618   Integrated management of murda complex in chilli Integrated management of shoot and fruit borer in brinjal	Irrigated   Kharif 2009   Chilli   U S Agri 618   Integrated management of murda complex in chilli in the chilli in the chilli in the complex in chilli in	Proper   P	Project   Proj	Prigated   Commercial   Rainfed   Commercial   Rainfed   Commercial   Rainfed   Commercial   Rainfed   Commercial   Rainfed   Commercial   Commerc

Plantation	Irrigated	Kharif 2009	Coconut	Tiptur tall		IPM	Integrated management of BHC in coconut	05	05	02	08	10	
	Irrigated	Kharif 2009	Arecanut	Local	-	IPM	Integrated management of hidimundige roga in arecanut	01	01	-	5	5	
Fibre													
Dairy	Intensive	Intensive 2009 -		HFX	-	Feeding	Balanced feeding	10	10	-	10	10	-
Poultry Back yard				Giriraja	-	Productio n	Body weight gain	10	19	19	-	19	-
Rabbitry													
Pigerry													
Sheep													
and goat													
Duckery													
Common													
carps													
	Irrigated	Kharif – 2008-09	Fisheries	Indian major carps and Chinese carps		Integrated Fish Farming	Composite fish culture in farm ponds using advanced carp fingerlings	4000 m <sup>2</sup>	4000 m <sup>2</sup>	03	02	05	
	Irrigated	Kharif – 2008-09	Fisheries	Indian major carps and Chinese carps		Production Managemen t (Species selection)	Growth assessment of Common carp and Amur carp in farm ponds	3000 m <sup>2</sup>	3000 m <sup>2</sup>	02	01	03	
	Irrigated	Kharif – 2008-09	Fisheries	Indian major carps and Chinese carps		Production Managemen t	Fish culture in concrete tanks using advanced fingerlings	500 m <sup>2</sup>	500 m <sup>2</sup>	04	01	05	

	Margala	 т —	T	T	<u> </u>	T			1	7, 1101	<u>,</u>	l
· [	Mussels						l i	ļ ,		l j	'	l
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	Ornamen	1								1	' 1	l
	tal fishes									1	1	l
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										<u> </u>	<u> </u>	
	Oyster										'	
	mushroom									1	1	
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										<u> </u>	<u> </u>	
	Button										'	
	mushroom									1	1	
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										1	1	
	Sericulture	<del> </del>		<del> </del>						1	<u> </u>	
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		1	1	<u> </u>						L	<u>'</u>	
	Apiculture										<u>'</u>	
										1	1	
	Implements	+	+	<del>                                     </del>			<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<del>                                      </del>	<u> </u>	<del></del>
	<del>-</del>	+	+	+	<u> </u>	<del> </del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<del>     </del>	Ч	<u> </u>
											<u>'</u>	
_	Others			-	_		-			I _	' <u></u>	
	(specify)									1	1	
	(Specify)	4	<u> </u>				<u> </u>				<u>'</u>	l
										1	1	l
	·	 			L	J		L			<u> </u>	

Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year		Status of		Previous crop grow
Curegory	2-1-1-1-1	Year	Стор	, arreey, steed	11,0114			Souson and your	N	P	K	F 8
Oilseeds												
	Irrigated	Kharif-2009	Groundnut	GPBD-4	-	ICM	ICM in leaf spot resistant variety GPBD-4	Kharif 2009- 10	M	L	M	Groundnut
	Irrigated	Rabi/ Summer 2009	Sunflower	-	KBSH- 53	ICM	ICM in powdery mildew resistant hybrid KBSH-53	Rabi/ Summer 2009	M	М	М	Maize
Pulses												
Cereals	Rainfed	Rabi/Summer 2009-10	Jowar	M-35-1	-	ICM	ICM in Jowar	Rabi/Summer 2009-10	M	M	M	Jowar
Millets	Rainfed	Kharif 2009	Navane	STA-326	-	ICM	Production technology of high yielding navane variety (STA- 326)	Kharif 2009	M	M	M	Ragi
	Rainfed	Kharif 2009	Same	OLM-203	-	ICM	Production technology of high yielding same variety (OLM- 203)	Kharif 2009	L	М	М	Ragi
Vegetables	Rainfed	Kharif 2009- 10	Onion	Arka Kalyan	-	Production technology	Purple blotch disease resistant variety Arka kalyan	Kharif 2009- 10	M	M	М	Chilli
	Irrigated	Kahrif 2009- 10	Drumstick	Dhanraj	-	Production technology	Production technology of HYV dhanraj in coconut gardens	Kharif 2009- 10	M	L	M	-
	Irrigated	Kharif 2009	Chilli	US Agri 611	-	IDM	Integrated management of murda complex in chilli	Kharif 2009- 10	L	M	M	Chilli
	Irrigated	Rabi/ Summer 2009-10	Brinjal	-	M-11	IPM	Integrated management of shoot and fruit borer in brinjal	Rabi/ Summer 2009-10	M	L	M	Brinjal
Flowers												
Ornamental												
Fruit	Irrigated	Kharif 2009- 10	Banana	Grandrine Yalakki	-	Integrated nutrient management	Use of micro nutrient mixture Banana special	Kharif 2009- 10	L	М	М	Chilli
Spices and												
condiments												
Commercial												
Medicinal							1			1		
and												
aromatic												
Fodder									İ		1	
Plantation	Irrigated	Kharif 2009	Arecanut	Local	-	IDM	Integrated management of hidimundige roga in arecanut	Kharif 2009	M	L	M	Arecanut
Fibre					1		manuago roga in arccanat			1		

#### **5.B.** Results of Frontline Demonstrations

#### 5.B.1. Oilseeds:

	Name of the			Farming	No. of	A maa		Yielo	l (q/ha	)	%	*Econ		demonstr	ation	*Economics of check (Rs./ha)			
Crop	technology demonstrated	Variety	Hybrid	situation	Demo.	Area (ha)		Demo Chec		Check	Increase	Gross Cost				Gross Cost	Gross Return	Net Return	** BCR
							Н	L	A			Cost	Return	Ketuin	DCK	Cost	Return	Return	BCK
Groundnut	ICM in leaf spot resistant groundnut variety	GPBD- 4	-	Irrigated	11	05	19.1	14.8	17.1	12.0	42.50	17000	36765	19765	2.16	18100	23400	5300	1.29
Sunflower	ICM in powdery mildew resistant sunflower hybrid		KBSH- 53	Irrigated	20	08	19.6	14.9	18.1	11.8	53.38	17550	43120	25570	2.26	18650	25370	6720	1.36
	Total																		

Data on additional parameters other than yield

	Data on other parameters in relation to techr	nology demonstrated	
Parameter with unit	Demo	Local	
Sunflower			
Plant height (cm)	169.8	144.3	
Head diameter	14.30	12.60	
% Powdery mildew incidence	2 %	15 %	
Groundnut:			
Plant height (cm)	15.80	10.70	
No. of pots /plant	33	20	
% leaf spot incidence	3 %	15 %	

5.B.2. Pulses

Crop	Name of the technology	Variety	Hybrid	Farming situation	No. of	Area		Yiel	d (q/l	na)	%	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
_	demonstrated	variety	Hybrid		Demo. (h	(ha)		Demo	)	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							Н	H L A											
	Integrated			Rainfed															
Redgram	pest	Maruti			25	10	5.6	3.0	4.0	3.9	2.6	7875-	19350-	11475-	2:5	7750-	17550-	9800-	2.3
Reugiani	management	maruti			23	10	3.0	3.0	7.0	3.7	2.0	00	00	00	2.3	00	00	00	2.3
	in redgram																		
	Total																		

Data on additional parameters other than yield

Butu on additional parameters other than yr	cia											
Data on other parameters in relation to technology demonstrated												
Parameter with unit	Parameter with unit Demo Local											
Fruit borer incidence	20%	35 %										

5.B.3. Other crops

Crop	Name of the	***	TT 1	Farming situation	N 45	Area		Yield	(q/ha)		%	*Econ	omics of demor	stration (Rs./h	ıa)	*Economics of check (Rs,/ha)				
Стор	technology demonstrated	Variety	Hybrid		No. of Demo.	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
							H	L	A											
Cereals: Rice	Integrated crop management in rice	Bpt sona		Irrigated	15	06	54.0	43.0	49.4	47.5	4.0	23125-00	59280-00	36155-00	2.56	27375-00	57000-00	29625-00	2.08	
	Production technology of high yielding navane variety	STA-326	-	Rainfed	07	04	9.6	8.6	9.1	5.9	54.23	2800-00	7280-00	4480-00	2.6	2100-00	4720-00	3070-00	2.24	
	Production technology of high yielding same variety	OLM-203	-	Rainfed	08	04	09	7.8	8.5	5.4	57.4	3000-00	7650-00	4650-00	2.55	2100-00	4860-00	2760-00	2.31	
	ICM in Rabi Jowar	M-35-1	-	Rainfed	13	06	11.9	9.1	10.61	7.9	34.3	6000-00	10610-00	4610-00	1.76	5000-00	7110-00	2110-00	1.42	
Millets																				
Vegetables	Purple blotch resistant variety Arka kalian in onion	Arka kalyan	-	Rainfed	10	05	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Production technology of HYV dhanraj in coconut gardens	Dhanraj	-	Irrigated	1	05	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tomato	Application of vegetable special in tomato	US Agri 618	-	Irrigated	10	12	42.0 t/ha	31.5 t/ha.	37.2 t/ha	34.0 t/ha	9.4	61125-00	167400-00	106275-00	2.74	58550-00	153000-00	94450-00	2.61	
Chilli	Integrated management of murda complex in chilli	-	US Agri 611	Irrigated	10	05	24.1 t/ha	18.7 t/ha	21.2 t/ha	15.2 t/ha	39.47	45000	169600	124600	3.76	50000	121600	71600	2.49	
Brinjal	Integrated management of shoot & fruit borer in brinjal	-	M-11	Irrigated	10	04	16.1 t/ha	13.6 t/ha	15.1 t/ha	10.7 t/ha	41.12	20000	75500	55500	3.7	21500	53500	32000	2.48	
Flowers																			1	
										<del> </del>									+	
Ornamental																				
Fruit Banana	Micro nutrient management	G 9	-	Irrigated	06	04	592.6	449.6	533.9	400.1	33.44	140510- 00	373730-00	2.3 3270- 00	2.65	123250-00	280.70-00	156820-00	2.27	
		Yelakki	-	Irrigated	06	04	246.1	199.3	225.9	1622	39.27	126549- 00	338250-00	212301-00	2.67	104943-00	243300-00	212301-00	2.31	

Spices and												 	avariagere	
condiments														
Commercial														
Medicinal and														
aromatic														
Fodder														
Plantation														
Arecanut	Integrated management of hidimundige roga in arecanut	Theerthahally local	-	Irrigated	05	01	Is in p	rogress						
Fibre														
Others														
(pl.specify)														

Data on additional parameters other than yield.

	Data on other parameters in re	elation to technology o	demonstrated
Crop	Parameter with unit	Demo	Local
Fruit	G 9 –Average bunch weight (kg)	38.9	29.1
Banana	No. of fingers in the bunch	219	176
Fruit	Yalakki- Average bunch weight (kg)	16.43	11.8
Banana	No. of fingers in bunch	238	188
Rice	Height of plant (cm)	80.0	85.0
Tomato	Average height of plant (cm)	79.7	66.5
	Average number of fruits / plant	39.6	30.0
Chilli	Height of plant 9cm)	70.5	61.8
	% disease incidence (%)	182	151
	No. of fruits /plant	2 %	20 %
	Yield (t/ha)	21.2	15.2
Brinjal	No. of fruits / plant	39	28
	% incidence of shoot and frit borer	2 %	30 %
	Yield (t/ha)	15.6	10.7
Navane	Plant height (cm)	87.25	82.2
	yield qt/ha	9.1	5.9
Same	Plant height (cm)	81.5	79.7
<u> </u>	Yield (q/ha)	8.5	5.4
Jowar	Plant height (cm)	203-90	196.70
	Yield (q/ha)	10.61	7.90

### 5.B.4. Livestock

Type of	Name of the technology	Breed	No. of	No. of		Yield (	(l/day)		%	*Eco	(Rs.		ation		(Rs.	mics of check Rs./ha)	
livestock	demonstrated	Dreeu	Demo	Units		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					H	L	A										
Dairy	Feeding balanced cattle feed along with Area specific mineral mixture	HFX	10	10	12	06	8.8	7.5	14.20	1800	3960	2160	2.2	1800	3375	1575	1.88
Poultry	Rearing Giriraja in scarcity yard	Giriraja	10	10	1760 g	1655 g	1709 g	700 g	59	300	1000	700	3.33	500	800	300	1.60
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)	Fodder production	Co-3 Napier	10	10	400	325	359	250	30%	20000	40000	19550	2.0	17500	25000	7500	1.42

Data on additional parameters other than yield

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

### 5.B.5. Fisheries

Type of	Name of the	Breed	No. of	Units/		Yiel	d (q/h	a)	%	*Eco	nomics of d (Rs./l		tion	*I	Economics (Rs./l		
Breed	technology demonstrated	Breed	Demo	Area (m <sup>2</sup>		Demo	1	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					Н	L	A										
Common																	
carps																	
	Composite fish	Catla	05	4000	49	43	46										
	culture in farm	catla,		$m^2$													
	ponds using	Labeo								48000/-	138000/-	90000/-	1.88				
	advanced carp	rohita															
	fingerlings																
	Growth	Cirrhinus	06	3000	8	7.49	7.7	06									
	assessment of	mrigala,		$m^2$													
	Common carp	Cyprinus															
	and Amur carp in	carpio,															
	farm ponds	Amur							25	12000/-	23200/-	11200/-	0.93	12000/-	18000/-	6000/-	0.50
	(Production data	Cyprinus															
	of only Amur and	carpio															
	Common carp are																
	given)																

												<del></del>	 ,,	ia, Davai	
	Fish culture in	Catla	05	500	38	30	34								
	concrete tanks	catla,		$m^2$					40000/	00000/	50000/	1.40			
	using advanced	Labeo							40000/-	99000/-	59000/-	1.48	 		
	fingerlings	rohita													
Mussels															
Ornamental															
fishes															
Others															
(pl.specify)															

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

H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

·	Data on other parameters in relation to tech	nology demonstrated	
Parameter with unit	Demo	Local	
Fish average weight in (g)	622	<del></del>	
Fish average weight in (g)	600	450	
Fish average weight in (g)	550		

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

**5.B.6.** Other enterprises

Enterprise	Name of the technology	Variety/	No. of	Units/ Area		Yiel	ld (q/	ha)	%	*Ec		f demonstrati s./ha)	on			ics of check s./ha)	
Enterprise	demonstrated	species	Demo	( <b>m</b> <sup>2</sup> }	I	Demo	•	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oyster																	
mushroom																	
Button																	
mushroom																	
Vermicompost																	
Sericulture																	
Apiculture								•								•	
Others																	
(pl.specify)																	

H-High L-Low, A-Average

Data on additional parameters other than yield

zata en adamenta parameters emer enan ju													
	Data on other parameters in relation	n to technology demonstrated											
Parameter with unit Demo Local													

5.B.7. Farm implements and machinery

Name of the implemen	Name of the technology demonstrated	No. of Domo	Units/ Area (m <sup>2</sup> }		Yie	ld (q/	ha)	0/ Ingransa	*Econo	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
Name of the implement	Name of the technology demonstrated	No. of Dellio	Omis/ Area (m.)	]	Demo	)	Check	% Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
				Н	L	Α											

H-High L-Low, A-Average

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

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

5.B.8. Cotton

#### Summary of demonstrations conducted under FLD cotton

#### **Demonstrations conducted under FLD cotton**

Sl. No.	Category	Technology Demonstrated	Variety	Hybrid	Season and	Area (	(ha)		of farme nonstration		Reasons for shortfall in
110.		Demonstrated		-	year	Proposed	Actual	SC/ST	Others	Total	achievement
1		ICM		MRC-	Kharif	20	22	32	23	55	
	Production	with KNO <sub>3</sub> spray		7918	2009-10						
2.	Technology	ICM		MRC-	Kharif	10	18	05	40	45	
		with KNO <sub>3</sub> spray		6918	2009-10						

# **Production technology demonstrations**

### **Performance of demonstrations**

Farming situation	<b>Technology Demonstrated</b>	Village	Area (ha)	No.of demo.	Variety	Hybrid	Yield	(q/ha)	% Increase
				140.01 delilo.	Variety	Hybrid	Demo	Local	
		Taraganahalli Honnali -tq	10	25		MRC 7918	19.58	15.40	27.14
		Obalapura Jagalur-tq	12	30		MRC 7918	18.20	14.80	22.97
Rainfed	Integrated crop management	Anajigere Harapanahalli –tq	15.6	39		MRC 6918	16.50	13.30	24.00
		Budhihall Harapanahalli –tq	2.4	06		MRC 6918	16.93	13.40	26.00

Price: MRC-7918 and MRC-6918 Rs. 3900/ q. (Taraganahalli), Rs. 3780/- q. (Obalapura), Rs. 3700/- (Anajigere and Budhihall)

E	conomics of demoi	nstration (Rs./ha)		Economics of local check (Rs./ha)						
Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR			
21750-00	76362-00	54612-00	3.51	22000-00	60060-00	38060-00	2.73			
21750-00	68796-00	47046-00	3.16	22000-00	55944-00	33944-00	2.54			
21750-00	61050-00	39300-00	2.80	21700-00	49210-00	27510-00	2.26			
21750-00	62641-00	40891-00	2.88	21750-00	49580-00	27830-00	2.27			

# Extension Activities:

Sl.No.	Activities	No. of programmes		No. of participants	1	Remarks
			Male	Female	Total	
1.	Training	7	200	56	256	
	programmes					
	For farmers					
	Extension	4	51	20	71	
	functionaries at					
	bimonthly and					
	technology week					
2.	Field day	2	78	01	79	Anajigere/ Budhihal and
						Taraganaahalli
3.	Media Coverage:					Vijayakarnataka
	Paper clippings	10				Prajavani
						Janathavani
TV and I	Radio Talk				Date of Telecast	TV
1.	Fertilizer Management in Bt. Cotton				01-08-2009	
2.	Fertilizer Managemen	nt in Bt. Cotton		25-08-2009	E-Tv Annadatha	
3.	ICM regarding agron	omic practices to increase	·	12-09-2009		
4.	Cultivation practices of Bio organic Cotton				14-09-2009	AIR, Bhadravathi

Taralabalu Krishi Vigyan Kendra, Davanagere

### Performance of Bt hybrids, Desi hybrids, non-Bt hybrids and Varieties in Front Line Demonstrations in cotton during 2009-10

	Farming	Technology	Area	No.of			Yield (	q/ha)	%	Econor	nics of den	nonstration (	Rs./ha)	Economics of local check (Rs./ha)			
Category	situation	Demonstrated	(ha)	demo.	Variety	Hybrid	Demo	Local	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Bt hybrids																	
Desi hybrids (AXA)																	
HXB Hybrids																	
HXH Hybrids																	
Herbacium Varieties																	
Hirsutum Varieties																	
Arboreum Varieties																	

### **Integrated pest management demonstrations**

Farming situation	Variety	Hybrid	No. of blocks	Total No. of Demo.	Area	Incide	nce of pest and	d diseases (%)	Seed C	otton Yield (	q/ha)	Economics of	f demonstra	ation (Rs./ha)		Economics of	local chec	k (Rs./ha)	
					(ha)								Gross	Net Return	BCR		Gross	Net Return	BCR
						IPM	Non IPM	% Change	IPM	Non IPM	% Change	Gross Cost	Return			Gross Cost	Return		<u> </u>
																			<u> </u>
																			<u> </u>

**Demonstrations on farm implements** 

Name of the implement	Area (Ha)	No. of Demo.	Name of the technology demonstrated	Details on parameters				
				Demo	Local check	BCR		
Total								

**Extension Programmes organized in Cotton Demonstration Plots** 

Extension activity	No. of						
	Programmes		<b>Participants</b>		SC/ST		
		Male	Female	Total	Male	Female	Total
Consultancy							
Conventions							
Demonstrations							
Diagnostic surveys							
Exhibition							
Farmer study tours							
Farmers Field school							
Field Days							
Field visits							

Gram sabha				
Group discussions				
Kisan Gosthi				
Kisan Mela				
Training for Extension Functionaries				
Training for farmers				
Viedo show				
Newspaper coverage				
Popular articles				
Publication				
Radio talks				
T.V. Programme				
Others (Pl.specify)			•	
TOTAL				

### Technical Feedback on the demonstrated technologies on all crops / enterprise

S.	Crop / Enterprise	Name of the technology demonstrated	Feed Back
No			
1	Groundnut	ICM in leaf spot resistant variety GPBD-4	Need to develop root and collar rot and bud necrosis
			resistance variety
2	Sunflower	ICM in powdery mildew resistant hybrid KBSH-53	Need to popularize IPDM in sunflower
3.	Arecanut	Integrated management of hidemundige roga in	Need to popularize, recommendations given by
		arecanut	AICRP in arecanut, Shimoga
4	Chilli	Integrated management of murda complex is chilli	Need to popularize IDM practices
			Need to develop murda complex resistant varieties
5	Brinjal	Integrated management of shoot and fruit borer in	Availability of neem soap and wota traps at RSK
		brinjal	level
6	Fodder	Co-3 fodder production	Easy to adopt
7	Dairy Cattle	Balanced nutrition	Feeding cost reduced
8	Poultry	Giriraja birds rearing in backyard	Birds availability is a problem
9	Banana	Use of micronutrient mixture banana special	Need to provide nutrient formulation to KVK to
			prepare the produce in the KVK
10	Navane	Production technology of high yielding navane variety	Seeds should be made available at RSK level
		STA-326	
11.	Same	Production technology of high yielding same variety	Seeds should be made available at RSK level
		OLM-203	
12.	Jowar	ICM in rabi jowar variety M-35-1	Seeds should be made available at RSK level
13	Redgram	ICM in redgram	Develop pod borer resistant variety seeds should be
			made available at RSK level. Need to popularize
			ICM.
14	Composite fish culture in farm ponds using advanced carp	Advanced fingerlings should be made available by	Composite fish culture in farm ponds using
	fingerlings	Government system in near by place and in appropriate	advanced carp fingerlings
		time	
		Bag feeding with complete feed is good in increasing	
		the average weight of fish	
15	Growth assessment of Common carp and Amur carp in farm	Amur carp was found to perform better than ordinary	Growth assessment of Common carp and Amur carp
	ponds	common carp	in farm ponds
		Fingerlings should be made available by Government	
		system in nearby places	
16	Fish culture in concrete tanks using advanced fingerlings	Rate of weight gain is slower in concrete tank that in	Fish culture in concrete tanks using advanced
		earthern ponds	fingerlings

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Groundnut	ICM in leaf spot resistant groundnut variety GPBD-4	Higher yield and resistant to leaf spot trichoderma seed treatment and soil application reduces soil borne diseases
2	Sunflower	ICM in powdery mildew resistant hybrid KBSH-53	Uniform growth, more yield and powdery mildew resistant
3	Arecanut	Integrated management of hidimundige in arecanut	Proper drainage, green manure application, soil loosening and trichoderma application are useful practices reduces the hidimundige incidence.
4	Chilli	Integrated management of murda complex in chilli	Timely fallow of IPM practices reduces murda incidence
5.	Brinjal	Integrated management of shoot and fruit borer in brinjal	Installation of wota traps reduces the cost on chemicals and avoids fruit borer incidence by trapping.
6	Fodder	Co-3 fodder production	Easy to adopt
7	Dairy Cattle	Balanced nutrition	Giving good results
8	Poultry	Giriraja birds in backyard	Predator problem
9.	Banana	Use of micronutrient mixture banana special	Increased in bunch weight and bunches having good shelf life
10.	Navane	Production technology of high yielding navane variety STA-326	Farmer felt happiness and expressed opinion that even under less rainfall condition STA-326 variety gives more yield compared to local variety. It is suited for drought condition
11.	Same	Production technology of high yielding same variety OLM-203	Farmers felt happiness and expressed opinion that even under less rainfall condition OLM-203 variety gives more yield compared to local varieties. It is suited for draught condition.
12.	Jowar	ICM in rabi jowar variety M-35-1	Farmers feels that M-35-1 variety yields more. Good taste for consumption and resistant to smut disease.
13	Redgram	ICM in redgram	Adoption of ICM practices results in higher yield.
14	Fisheries	Composite fish culture in farm ponds using advanced carp	- Scientific fish culture practices are useful and user friendly
		fingerlings	<ul> <li>Proper management and regular monitoring will add to the total production</li> <li>Income gained in small area has opened our eyes</li> </ul>
15.	Fisheries	Growth assessment of Common carp and Amur carp in farm ponds	<ul> <li>Amur performed better than ordinary Common carp with respect to feed conversion and total weight gain</li> <li>Seed availability should be assured in the vicinity</li> <li>Seed price must be brought down</li> </ul>
16.	Fisheries	Fish culture in concrete tanks using advanced fingerlings	Farmers have felt that fish culture by them should be taken up in larger earthern ponds in future.

# **Extension and Training activities under FLD**

### 1. Chilli

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	On campus training	01	07.07.2009	12	Integrated management of murda complex in chilli
2	Group discussion	01	05.07.2009	15	Regarding selection of farmers
3	Field visit to FLD plots	06	09.07.2009		Regular follow up visits and necessary control
			28.07.2009		measures
			11.08.2009		
			17.09.2009		
			26.10.2009		
			04.11.2009		
4	Method demonstration	04			Root dipping of seedlings, neem cake application and spray solution preparation

### 2. Sunflower

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	On campus training	02	07.11.2009	20	-Production technology in powdery mildew resistant hybrid
			08.11.2009	17	-Management of bud necrosis, black headed caterpillar and use of borax in sunflower.
2	Group discussion	01	07.11.2009	15	Preliminary visit
3	Field visit to FLD plots	08	07.11.2009 06.12.2009 28.12.2009 15.01.2010 02.02.2010 26.02.2010 13.03.2010 20.03.2010		Sowing ,diagnosis of pests, bud necrosis management and borax spray
4	Method demonstration	03		50	Seed treatment with gaucho, spray solution preparation and borax spray
5	Field day	01	13.03.2010	25	Sharing the experience of sunflower hybrid

3. Brinjal

Sl.No.	Activities	No. of programmes	Date	No. of participants	Remarks
1.	On campus training	01	15.01.2010	15	Integrated management of shoot & fruit borer in brinjal
2.	Group discussion	02	29.01.2010 13.01.2010	24	Preliminary visit
3.	Field visits to FLD plots	07	13.01.2010 29.01.2010 12.02.2010 27.02.2010 09.03.2010 30.03.2010 14.04.2010		Transplanting, traps installation, neem soap spray diagnosis of pests and spray solution preparation
4.	Method demonstrations	03	29.01.2010 12.02.2010 09.03.2010	27	Wota traps installation and spray solution preparation

### 4. Groundnut

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	On campus training	01	25.06.2009	18	Improved cultivation practices of tikka leaf spot resistant variety GPBD-4 and importance of seed treatment with trichoderma bioagent
2	Group discussion	02	24.06.2009 28.06.2009	23	Preliminary visit for selection of farmers
3	Field visit to FLD plots	08	29.06.2009 09.07.2009 28.07.2009 04.08.2009 11.08.2009 17.09.2009 26.10.2009 04.11.2009		Seed treatment, intercultivation, gypsum application, observation of pests and diagnostic visit
4	Method demonstration	03		48	Seed treatment, groundnut stripper and groundnut decorticator
5	Paper coverage	02	04.07.2009 23.08.2009		Janathavani Janathavani

# 5. Redgram

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	On Campus training	01	18-09-2009 12 10-08-2009 10		
2	Method demonstration	03	10-08-2009	10	Seed treatment with trichoderma traps installation and neem and
			21-08-2009	08	chemical spray
			03-11-2009	15	
3	Field visits	06	10-08-2009	-	Sowing; Diagnostic visits; Trap installation; Chemicals spray.
			21-08-2009		
			03-11-2009		
			16-12-2009		
			22-12-2009		
			30-12-2009		
4	Media coverage:		29-06-2009		Vijayakarnataka
	Paper clippings		02-07-2009		Janathavani
4			30-12-2009 29-06-2009		

# 6 Arecanut

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	On campus training	01	18.09.2009	12	Integrated management of hidimundige roga in arecanut
2	Group discussion	02	21.07.2009 18.08.2009	27	Preliminary visit for selection of farmers
3	Field visit to FLD plots	07	21.07.2009 18.08.2009 29.08.2009 07.09.2009 06.10.2009 22.12.2009 16.02.2010		Method of Fertilizer application, trichoderma application, observation of pests and Diagnostic visit, drainage system
4	Method demonstration	02		23	Method of Fertilizer application enrichment of FYM with trichoderma
5	Paper coverage	02	23.08.2009 28.08.2009		Vijayakarnataka Janathavani

# 7. Navane

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Farmers training	01	11-08-2009	17	Improved cultivation practices in navane
2	Group discussion	02	29-06-2009 30-06-2009	23 21	Regarding selection of farmer
3	Field visit to FLD plots	05	09-07-2009 17-07-2009 24-08-2009 11-09-2009 10-10-2009		Regular fallowup and necessary management practices for advised
4	Method demonstration	02	09-07-2009 17-07-2009	14	Demonstrated sowing, fertilizer and vermicompost application
5	Farmers attended during Technology Week	01	13-10-2009	85	Shared experience with farmer

# 8. Same

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Farmers training	01	03-07-2009	08	Improved cultivation practices in Same
2	Group discussion	01	29-06-2009	19	Regarding selection of farmers
3	Field visit to FLD plots	03	09-07-2009 11-09-2009 10-10-2009	-	Regular fallow up and necessary management practices for advised
4	Method Demonstration	01	09-07-2009	08	Demonstrated Sowing, fertilizer and vermicompost application

# 9. Jowar

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Farmers training	01	05-11-2009	13	Production technology of rabi jowar
2	Group discussion	01	02-11-2009	20	Regarding selection of farmers
3	Field visit to FLD plots	05	2-11-2009 26-11-2009 16-11-2009 19-01-2010 16-03-2010	-	Regular follow up visits and necessary control measures
4	Method	03		29	Trichoderma, fertilizers application and chemical spray
	demonstration				

# 10. Fisheries – Composite Fish Culture in farm ponds using advanced carp fingerlings.

Sl.No.	Activity	organized  od 5 19-03-1 22-05-0 24-06-0 14-07-0 22-07-1 2 24-3-0 25-03-0 9 15-07-0 13-08-0 04-09-1 25-09-0 16-12-0 03-06-1 10-06-1 3 08-07-0	Date	Remarks
1	Farmers training and method demonstrations	5	19-03-08 22-05-08 24-06-08 14-07-08 22-07-08	Integrated fish farming in inland ponds Aquaculture in farm ponds-pond preparation and management. Seed selection, stocking, fertilization and feeding management. Fish culture in paddy plots-an additional crop. Lime application in aquaculture.
2	Group discussion	2	24-3-08 25-03-08	Identification of potential farmers and selection of farmers
3	Field visit to FLD plots	9	15-07-08 16-07-08 13-08-08 04-09-08 25-09-08 16-12-08 03-06-09 10-06-09	Soil testing Seed stocking Feeding demo- Vitamin mineral Mixture given Follow up visit TRDF board member visit Follow up visit and test sampling Follow up visit and instructed for harvesting Harvested
4	Media coverage Paper clippings	3	08-07-08 06-07-08 27-06-08	Janathavani: Beneficial aquaculture for small farmers Vijayakarnataka: Aquaculture for enhanced benefits. Kannada Prabha: Inland farmers need to took at aquaculture.
	Radio Programme	1	08-06-08	AIR, Bhadravathi - "Larvicidal fishes for better health"

# 11. Fisheries – Growth assessment of common carp and Amur Common Carp in farm ponds.

Sl.No.	Activity	No. of activities organized	Date	Remarks
1	Farmers training and method	2	23-03-08	Aquaculture practices in Amur Carp and Common carp farming.
	demonstrations			Fish seed selection and pond management.
			15-07-08	
2	Group discussion and farmers	2	15-07-08	
	selection		04-08-08	
3	Field visit to FLD plots	6	16-07-08	Seed stocking
			13-08-08	Feeding regime
			25-09-08	Regular fertilization
			16-12-08	Sampling for weight gain observation
			03-06-09	Sampling
			17-06-09	Final harvest

# 12.Fisheries – Fish culture in concrete tanks using advanced fingerlings.

Sl.No.	Activity	No. of activities organized	Date	Remarks				
1	Farmers training	1	25-03-08	Fish culture in water storage structures.				
2	Group discussion	1	22-05-08	Farmers identification for FLD				
3	Field visit to FLD plots	6	16-07-08	Seed stocking				
			13-08-08	Feeding regime				
			25-09-08	Follow-up				
			16-12-08	Sampling				
			03-06-09	Sampling				
			12-06-09	Harvested				

# 13. Dairy

Sl. No.	Activity	No. of activities organised	Number of participants	Remarks
	Dairy:			
1	Field days	-	-	-
2	Farmers Training	6	70	-
3	Media coverage	2 (TV)	-	-
4	Training for extension functionaries	-	-	-

### PART VI – DEMONSTRATIONS ON CROP HYBRIDS

**Demonstration details on crop hybrids** 

Type of Breed	S.	Name of the	No. of	Area	Yield (q/ha)			%	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)				
Type of Breed	demonstrated	hybrid	Demo	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					Н	L	A										1
Cereals																	
Bajra																	
Maize																	
Rice																	1
Sorghum																	1
Wheat																	1
Others																	1
(pl.specify)																	
Total																	1
Oilseeds																	1
Castor				İ									1				1
Mustard																	1
Safflower																	1
Sesame																	1
Sunflower	ICM in powdery mildew resistant hybrid KBSH-53	KBSH-53	20	8	19.0	14.9	18.1	11.8	53.38	17550	43120	25570	2.26	18650	25370	6720	1.36
Groundnut	·																1
Soybean																	1
Others																	1
(pl.specify)																	
Total																	
Pulses																	
Greengram																	1
Blackgram																	1
Bengalgram																	1
Redgram																	1
Others																	1
(pl.specify)																	
Total																	1
Vegetable																	1
crops																	
Bottle gourd																	
Capsicum																	1
Others				İ									1				1
(pl.specify)																	
Total																	1
Cucumber																	1
Tomato																	1
Brinjal	Integrated management of shoot & fruit borer in brinjal	M-11	10	04	16.1t	13.6t	15.1t	10.7t	41.12t	20000	75500	55500	3.70	21500	53500	32000	2.48
Okra	· J.:			1													<b>†</b>

Onion																	
Potato																	
Field bean																	
Chilli	Integrated management of murda complex in chilli	US Agri-611	10	5	24.1	18.7	21.20	15.2	39.47	45000	169600	124600	3.76	50000	121600	71600	2.49
Total																	
Commercial																	
crops																	
Sugarcane																	
Coconut																	
Others																	
(pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum																	
(Fodder)																	
Others																	
(pl.specify)																	
Total																	

H-High L-Low, A-Average

### **PART VII. TRAINING**

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

	No. of					No. of Participa	ints			
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	01	09	04	13	05	04	09	14	08	22
Micro Irrigation/Irrigation										-
Seed production										-
Nursery management										-
Integrated Crop Management	08	62	17	79	35	15	50	97	32	129
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	01	04	-	04	-	01	01	04	01	05
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization		1								

Protective cultivation										
Micronutrient management	01	08	-	08	02	-	02	10	-	10
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Micronutrient management	02	41	-	41	04	-	04	45	-	45
Precision Farming	01	20	-	20	05	-	05	25	-	25
Hitch Horticulture	01	-	-	-	26	02	28	26	02	28
Organic farming in Horticulture crops	10	214	05	219	10	01	11	224	06	230
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										

d) Plantation crops	01	09	01	10	-	-	-	09	01	10
Nutrient Management										
Production and Management technology	02	19	01	20	-	-	-	19	01	20
Processing and value addition										
Pest management	01	09	01	10	-	-	-	09	01	10
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology	01	01	11	12	02	-	03	03	11	14
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management	04	40	-	40	12	04	16	52	04	56
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers	01	12	-	12	03	-	03	15	-	15

Soil and water testing		1		1	1 1	Ta		isili vigyali	Kenura, Dav	I
Soil sampling procedure in Agriculture and Horticulture crops	01	11	01	12	08	-	08	19	01	20
Livestock Production and Management										
Dairy Management	1	-	41	41	-	21	21	-	20	41
Poultry Management	02	04	-	04	10	-	10	14	-	14
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology	01	15	-	15	05	-	05	10	-	15
Production of quality animal products										
Use full information about animal husbandry	01	05	14	19	02	03	05	07	17	24
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	-	17	17	-	-	-	-	17	17
Value addition	01	03	02	05	-	-	-	03	02	05
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										

						I d	<u>I alabalu Ni</u>	ısılı vigyali	Kenura, Dav	/anagere
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	01	16	01	17	02	-	02	18	01	19
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	05	58	-	58	26	-	26	84	-	84
Integrated Disease Management	01	03	02	15	05	-	05	18	02	20
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Seed treatment	01	6	1	7	7	4	11	13	5	18
Fisheries										
Integrated fish farming	08	98	02	100	200	02	202	298	04	302
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture	02	18	07	25	22	-	22	40	07	47
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others - Fish culture as an enterprise in watershed areas	01	12	07	19	11		11	23	07	30
Production of Inputs at site										

G 1D 1 .'		1	1	1		10	li alabalu Ki	ısılı vigyalı	Kendra, Dav	ranayere
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	02	41	-	41	17	-	17	58	-	58
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths	02	-	07	07	-	40	40	-	47	47
Others a) Marketing trendes present day agriculture	03	-	30	30	-	17	17	-	47	47
b) Environment management plan	09	106	44	150	64	09	73	170	53	123
c) Farmers and Farm women training in agriculture	05	104	06	110	23	07	30	130	13	143
d) KVK orientation on programme	01	43	03	46	-	-	-	43	03	46
Agro-forestry										
Production technologies										
			L							

Nursery management					
Integrated Farming Systems					
Others (Pl. specify)					
TOTAL					

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

	No. of					No. of Participa	nts			
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production	01	-	-	-	15	05	20	-	20	20
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	04	60	-	60	29	-	29	89	-	89
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs	01	25	-	25	-	-	-	25	-	25
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										

Export potential vegetables  Grading and standardization  Protective cultivation					
Protective cultivation					
Others (pl.specify)					
b) Fruits					
Training and Pruning					
Layout and Management of Orchards					
Cultivation of Fruit					
Management of young plants/orchards					
Rejuvenation of old orchards					
Export potential fruits					
Micro irrigation systems of orchards					
Plant propagation techniques					
Others (pl.specify)					
c) Ornamental Plants					
Nursery Management					
Management of potted plants					
Export potential of ornamental plants					
Propagation techniques of Ornamental Plants					
Others (pl.specify)					
d) Plantation crops					
Production and Management technology					
Processing and value addition					
Others (pl.specify)					
e) Tuber crops					
Production and Management technology					
Processing and value addition					
Others (pl.specify)					

M C	ı		I	1	1	l I I	Talabala Ki	Jili Vigyali	Kenura, Dav	diagcic
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management	02	23	-	23	21	-	21	44	-	44
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	01	32	-	32	-	-	-	32	-	32
Nutrient use efficiency										
Balanced use of fertilizers	01	14	01	15	-	-	-	14	01	15
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management	02	04	-	04	09	27	36	13	27	40
Piggery Management										
Rabbit Management										
Animal Nutrition Management	03	41	-	41	-	-	-	41	-	41
Animal Disease Management										
Feed and Fodder technology	01	24	-	24	-	-	-	24	-	24

Production of quality animal products						l lu		Sili Vigyali	Kenura, Dav	l
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	01	-	12	12	-	03	03	-	15	15
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others –Use of improved term equipments in Paddy	01	27	-	27	-	-	-	27	-	27
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	03	35	-	35	31	-	31	35	31	66
Integrated Disease Management	01	20	01	21	-	-	-	20	01	21

					raralabalu Krishi vigyan Kenura, bavanagere				
Bio-control of pests and diseases									
Production of bio control agents and bio pesticides									
Others (pl.specify)									
Fisheries									
Integrated fish farming									
Carp breeding and hatchery management									
Carp fry and fingerling rearing									
Composite fish culture									
Hatchery management and culture of freshwater prawn									
Breeding and culture of ornamental fishes									
Portable plastic carp hatchery									
Pen culture of fish and prawn									
Shrimp farming									
Edible oyster farming									
Pearl culture									
Fish processing and value addition									
Others (pl.specify)									
Production of Inputs at site									
Seed Production									
Planting material production									
Bio-agents production									
Bio-pesticides production									
Bio-fertilizer production									
Vermi-compost production									
Organic manures production									
Production of fry and fingerlings									
Production of Bee-colonies and wax sheets									
			1				l		<u>.                                    </u>

Small tools and implements			-	<i>- 3/-</i>	Renard, Bave	<u>-</u>
Production of livestock feed and fodder						
Production of Fish feed						
Mushroom production						
Apiculture						
Others (pl.specify)						
Capacity Building and Group Dynamics						
Leadership development						
Group dynamics						
Formation and Management of SHGs						
Mobilization of social capital						
Entrepreneurial development of farmers/youths						
Others (pl.specify)						
Agro-forestry						
Production technologies						
Nursery management						
Integrated Farming Systems						
Others (Pl. specify)						
TOTAL						

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

	No. of				No. o	of Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	01	16	10	26	20	06	26	36	16	52
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying	1	-	26	26	-	10	10	-	16	26
Sheep and goat rearing	1	12	-	12	10	-	10	02	-	02
Quail farming										
Piggery										
Rabbit farming			1							

Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other a) Soil and water conservation	01	48	51	99	-	-	-	48	57	99
b) Role of youth in agriculture development	01	36	29	65	19	08	27	55	37	92
TOTAL										

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

	No. of				No. o	of Participants						
Area of training	Courses		General			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Nursery Management of Horticulture crops												
Training and pruning of orchards												
Protected cultivation of vegetable crops												
Commercial fruit production												
Integrated farming												
Seed production												
Production of organic inputs												
Planting material production												
Vermi-culture												
Mushroom Production												
Bee-keeping												
Sericulture												
Repair and maintenance of farm machinery and implements												
Value addition												
Small scale processing												
Post Harvest Technology												
Tailoring and Stitching												
Rural Crafts												
Production of quality animal products												
Dairying												
Sheep and goat rearing												
Quail farming												
Piggery												
Rabbit farming												

Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other a) Production technology in Agri. And animal husbandry	01	-	-	-	21	24	45	21	24	45
b) Nursery and bio fertilizer management in paddy	01	12	05	17	18	01	19	30	06	36
c) Environment awareness	01	62	09	71	-	-	-	62	09	71
TOTAL										

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

	No. of				No.	of Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	01	24	-	24	-	-	-	24	-	24
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	01	-	41	41	-	-	-	-	41	41
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	1	10	-	10	-	-	-	10	-	10
Household food security										
Fish rearing in water harvested storage structure	04	26	-	26	06	-	06	32	-	32
Market driven agriuchture	01	22	02	24	10	01	11	32	03	35
Total										

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

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

7.G. Sponsored training programmes

G.N.		No. of Courses				N	o. of Participa	nts			
S.No.	Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management										
1.a.	Increasing production and productivity of crops	01	14	-	14	-	-	-	14	-	14
1.b.	Commercial production of vegetables										
2	Production and value addition										
2.a.	Fruit Plants-Hitch horticulture	01	-	-	-	26	02	28	26	02	28
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	Soil health and fertility management										
4	Production of Inputs at site										
5	Methods of protective cultivation										
6	Organic farming in Horticulture crops	10	214	05	219	10	01	11	224	06	230
7	Post harvest technology and value addition										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	Farm machinery										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	Livestock and fisheries										
10	Livestock production and management										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition	6	91	02	93	170	03	173	261	05	266
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	Home Science										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	Agricultural Extension										
12.a.	Capacity Building and Group Dynamics	05	104	06	110	23	07	30	127	13	140
12.b.	Others –Integrated farming system	01	09	04	13	05	04	09	14	08	22
12b.	Environment management plan	09	106	44	150	64	09	73	170	53	223
	Total										

- Details of sponsoring agencies involved

  1. CBTMPCS, UAS, Bangalore

  2. Department of Horticulture, Zilla Panchayat, Davanagere under SEP-11 and NPOF schemes
- 3. District Watershed Development Department, Davanagere
- 4. NGO's
- 5. Input agencies

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

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

<b>Extension Programmes (including a</b>	ictivities of FLD program	1								
Nature of Extension Programme	No. of Programmes	No. of	f Participants (G	eneral)	N	lo. of Participar SC / ST	its	No.of	f extension pers	onnel
	G	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	07	98	00	98	62	00	62	-	-	-
Kisan Mela	02									
Kisan Ghosthi										
Exhibition	01									
Film Show	29	145	03	148	88	05	93	24	-	24
Method Demonstrations	34	135	35	170	50	21	71	-	-	-
Farmers Seminar	02									
Workshop	07	325	08	333	109	-	109	-	-	-
Group meetings	07	110	25	135	47	02	49	-	-	-
Lectures delivered as resource persons	30	1085	50	1135	372	40	412	-	-	-
Newspaper coverage	88									
Radio talks	24									
TV talks	13									
Popular articles	02									
Extension Literature	45	450	26	476	266	35	301	59	_	59
Advisory Services	67									
Scientific visit to farmers field	54									
Farmers visit to KVK	319	221	29	250	64	05	69	-	_	_
Diagnostic visits	12									
Exposure visits	03	22	-	22	-	_	-	-	_	_
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings	01	_	30	30	_	05	05	_	_	_
Celebration of important days										1
(specify):										
Parthenium awareness week	01	-	-	-	25	35	60	-	-	-
2. World kitchen garden day	01		_	_	18	35	53	_	-	-
3. World food day	01	60	20	80	50	15	65	_	-	-
4. Agriculture technology week	01	411	31	444	64	106	170	_	-	-
5. Kissan samman divas	01	05	04	09	16	10	26	_	-	_
6. World wet land day	01	60	10	70	-	-	-	_	-	_
7. National science day	01	24	-	24	_	_	_	_	-	_
Any Other (Specify)	Ü1									†
Seminar on Bringing Safe Water to	01	18	05	23	_	_	_	_	_	_

Rural India										
2. Seminar on inclusive rural	01	14	04	18	-	-	-	-	-	-
advancement through technology										
development										
3. Agri camps	07	110	25	135	47	02	49	-	-	-
4. Bi monthly workshop	05	-	-	-	-	-	-	-	-	-
5. NSS camps	02	-	-	-	-	-	-	-	-	-

# 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)	Ragi	GPU-28		1.3	800-00	06
	Navane	STA-326		0.5	500-00	10
	Paddy	JGL-1798		45	33000-00	60
Oilseeds						
Pulses	Cowpea	C-152		6	19000-00	120
	Redgram	Hydarabad -3C		0.4	1200-00	08
Commercial crops	Cotton	Bt		3.8	11020-00	-
	Maize	NAH-2049		51	41000-00	-
Vegetables	Ridge gourd	Local		0.2	200-00	-
	Cucumber	Local		0.47	250	
	Biter gourd	Local		0.14	200-00	
	Bottle gourd	Local		0.30	150-00	
	Tomato	Commercial		30	3000-00	
	Brinjal	Mycho		0.41	2500-00	
	Chills	Commericial		1.93	2000-00	
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total						

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

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings	Napier	Co-3		100000	20000	25
Forest Species						
Others(specify)						
Total						

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

Bio Products	Name of the bio-product	Quantity fa		Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)	Trichoderma	75	5625	40
Total				

### 9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows	HFX, Kankrej	05	75000-0	0
Buffaloes	-	-		-
Calves	HFX, Kankrej	03	3000-0	
Others (Pl. specify)	Hallikar	02	30000-0	0
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

# PART X – PUBLICATION, SUCCESS STORY, SWTL

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

- (A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)
- (B) Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters	ಕೃಷಿ ಸಿಂಚನ		04
Technical bulletins			
Popular articles	1. ತೋಟಗಾರಿಕೆ ಬೆಳೆಗಳಲ್ಲಿ ನಾಟಿ ಪದ್ಧತಿಗಳು	ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ ಮತ್ತು ಡಾ. ದೇವರಾಜ ಟಿ. ಎನ್.	01
	2. ರಸಗೊಬ್ಬರಕ್ಕೆ ಬೇಡ ಹಾಹಾಕಾರ	ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ	01
	3. ಬಾಳೆ ಬಂಗಾರ ಮಾಡುವ ಬಾಳೆ ಸ್ಪ್ಷೆಷಲ್	ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ., ಡಾ ಪ್ರದೀಪ್ ಹೆಚ್.ಎಂ.	01
	4. ಪೋಷಕಾಂಶಗಳ ಸಿಂಪರಣಾ ವಿಧಾನ-ಅಧಿಕ ಇಳುವರಿಗೆ ವರದಾನ	ಡಾ ಪ್ರದೀಪ್ ಹೆಚ್.ಎಂ., ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ,	01
		ಶ್ರೀ ಮಲ್ಲಿ ಕಾರ್ಜುನ ಬಿ.ಓ. ಮತ್ತು ಡಾ ದೇವರಾಜ ಟಿ. ಎನ್.	
	5. ಬಾಳೆಯಲ್ಲಿ ಎಲೆಚುಕ್ಕೆ ರೋಗದ ಸಮಗ್ರ ನಿರ್ವಹಣೆ	ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ., ಶ್ರೀ ಪ್ರಸನ್ನಕುಮಾರ್ ಎನ್. ಮತ್ತು ಡಾ. ದೇವರಾಜ ಟಿ.ಎನ್.	01
	6. ಮನೆಮನೆಯಲ್ಲಿ ಔಷಧಿವನ–ಮನೆಮಂದಿಗೆಲ್ಲ ಆರೋಗ್ಯ ಜೀವನ	ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ. ಮತ್ತು ಶ್ರೀ ಮಲ್ಲಿ ಕಾರ್ಜುನ ಬಿ.ಓ.	01
	7. ತೆಂಗಿನಲ್ಲಿ ಕಪ್ಪು ತಲೆ ಹುಳುದ ಸಮಗ್ರ ನಿರ್ವಹಣೆ	ಶ್ರೀ ಬಸವನಗೌಡ ಎಂ.ಜಿ. ಮತ್ತು ಹರೀಶ್ ಬಿ.ಎಸ್.	01
Extension literature	Azolla –as a feed source and Bio fertilizer	Dr. G.K. Jayadevappa	1000
Others (Pl. specify)			
TOTAL			

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

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	DVD	Bt Cotton production technology	01
-			

# 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).

India occupies 27% of total area in the world on under Cotton. Ranks first among other countries in Cotton area and second in production.

Davanagere district consists of six taluks, Harapanahalli, Jagalur, Harihara, Davanagere, Channagiri and Honnali. During 1990's Cotton area under Davanagere district was 25000 ha. But in 2003-04 Cotton area was reduced to 3,131 ha due to severe pest incidence, low yield and shutdown of cotton mills. Recent trend in cotton area and production of Davanagere district is shown in table-1 and one can see a gradual increase in the same during past 3 years.

### 1: Cotton scenario of the district

Year	Area (ha)	Production (Bales)
2002-03	4667	4,759
2003-04	3131	3,007
2004-05	9620	13,485
2005-06	5294	3,008
2006-07	6657	7,160
2007-08	6773	43,232
2008-09	12640	1,02,110

Table – 2: Rainfall data (mm)

Month	2003	2004	2005	2006
June	21.8	46.1	70.8	74.3
July	27.1	91.1	203.6	96.0
August	99.5	84.4	117.8	33.6
September	10.5	208.4	107.4	76.4
October	150.2	112.0	132.4	28.2
November			38.4	55.6

Taralabalu Krishi Vigyan Kendra came into existence during May 2005-06. Under Mini Mission of Cotton project our KVK had taken 50 acre demonstration in Bt cotton. Based on the survey and discussion with line departments, we selected Budihal, Nandikamba and Anajigere villages of Harapanahalli taluk for demonstration. Rainfall data in the selected area was found to be optimum for cotton production although erratic during some part of the years (Table-2).

**Farmers and scientists** interacted with brain storming session in the villages for Bt-cotton introduction. Farmers were of the opinion that Cotton is a waste crop, requires more pesticides and inturn increased cost of production. They also added that ten years back cotton area was more than 500 acres in their village and now it is hardly 5-10 acres in each village.

We were able to convince the farmers and selected 50 farmers for demonstration during 2006-07. First step after selection was the collection of **soil samples** from each demo plot and analyzed for nutrient status. Based on the soil test report, fertilizers were applied. KVK had conducted On campus and Off campus training programmes on improved Cotton production technology. We also introduced growth regulator (Planofix), MgSO<sub>4</sub> and pheromone traps in the package of the technologies. During that year, senior scientists from **Zonal Project Directorate –Zone VIII and Board members of Taralabalu Rural Development Foundation, Sirigere visited the Front Line Demonstration plots.** 

Farmers expressed that, who have grown maize suffered huge losses due to low rainfall at critical stages of crop growth during August and September 2006. Farmers were able to harvest only 15 q/ha against 60 q/ha with maize. On the other hand the farmers who had grown cotton under our FLD with Bt cotton technology did harvest 9 q/ha. The net income of the maize farmers was very low compared to the cotton grown farmer (Table-3).

Table – 3: Yield and income

Crop	Yield (q/ha)	Cost of cultivation (Rs/ha)	Gross returns (Rs/ha)	Net returns (Rs/ha)	B:C ratio
Bt Cotton	9	16,125	25,200	9,075	0.56
Maize	15	7,500	9,000	1,500	0.20

**Note:** Sale price: Rs. 2500-00/q (Cotton), Rs.600-00/q (Maize)

During the year 2007-08 farmers themselves came forward for cotton production. Then, we repeated the FLD with different farmers in the same villages. Now the cotton area has increased to >500 ha in and around Anajigere panchayath villages because of our KVK intervention during the **field visit** (Table-4).

Table-4: A survey conducted in Budihal/

Anajigere villages regarding Cotton area

Year	Area
2003-04	150 ha
2004-05	10 ha
2005-06	20 ha
2006-07	30 ha
2007-08	250 ha
2008-09	>500 ha

Table-5: A market survey conducted in Davanagere regarding sales of Bt Cotton seeds

Year	No. of packets
2005	3,800
2006	40,000
2007	50,000
2008	83,000

During the year 2008-09, cotton area in the district was found to be 15000 ha and it is replacing the maize and sunflower in some taluks as observed in the data collected by the Department of Agriculture. We have surveyed the market sale of Bt cotton seeds (Table-5) and by looking at this data we can clearly say that area is catching up in the district as a whole.

Turning point in our intervention was **Farmer Field School** in the Bt cotton production (ICM) which fine tuned the understanding of Bt technology in cotton by farmers during 2008-09.

KVK had conducted Farmers Field School in Bt Cotton during 2008-09 at Budihal involving 30 farmers on ICM v/s Non ICM in Bt cotton. It was a huge success and collaborator farmer is now the leader in cotton technology for the village.

During 2009-10 cotton has replaced sunflower to a substantial extent in Harapanahalli and Jagalur taluk. Farmers are convinced with the technology and now they have become experts in utilizing the same for their benefit through KVK technologies.

The farmers are now able to talk about technology in Bt cotton and now they are ready to practice it without our presence. This new practice fetching higher yield and higher income with reduced cost of production for the farmers.

During **field day** conducted in the year 2007-08, Mr. Nagaraj a farmer from Budihal had expressed that he had harvested 60 q of cotton in 3 acres and claims that he has cleared the Bank loans and leading his life happily after our KVK's intervention in Bt technology. Another farmer, Mr. Kenchappa of Anajigere harvested 48 q of cotton in 2.5 acre land by giving protective irrigation at critical stages.

**Conclusion:** Bt cotton technology introduced in our KVK has certainly brought smile on the faces of farmers and success of these farmers has impacted their friends and relatives to go in for cotton production. As long as Bt cotton seeds are supplied in time and with Government subsidy regaining its earlier name in cotton production is not an impossible dream for Davanagere district, given the story technical backup of our KVK.

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

- Common Interest Groups (CIGs): Four villages have been identified and family surveys have been conducted to analyze the current status of affairs as far as agriculture is concerned. Based on the data collected and analyzed, few CIGs per village depending on a crops or enterprise are being created to facilitate better agricultural practices. Results of these CIGs and their performance will be presented next year.
- FFS: Paddy is a major crop of the district and farmers are facing lot of problems regarding fertilizer and pest management. So Farmers Field School is a best tool to gather the farmers together from sowing to harvest in Paddy at Halebisleri of Davanagere taluk.
- Radio talks (24 Nos.): Taralabalu Krishi Vigyan Kendra Subject Matter Specialists (SMSs) gave radio talks on the problems prevailing in the district. Through this we have reached large number of farmers in a short span of time.
- **Television programmes (13 Nos.):** The technical interventions for burning problems of the major crops are disseminated through TV shows by the scientists. So these technologies will be tried by the large number of farmers in the district and other areas.

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Fisheries	Use of wooden blocks, big stone blocks and thorns in fish pond Erect waste netting material around the pond bund	<ul> <li>To curtail poaching in fish culture ponds broken wooden pieces can be planted in the middle of the pond emerging on the surface.</li> <li>Big stone blocks and thorns to avoid easy dragging of pond bottom.</li> <li>To avoid the entry of snakes, birds, frogs and other predators</li> </ul>
2.	Plant protection	<ul> <li>Use of lemon and shampoo in spraying</li> <li>Use of buttermilk and Acassia spp. trees gum for spraying</li> </ul>	<ul> <li>Shampoo helps in better spreading of spray solution</li> <li>Lemon helps in neutralizing the pH of water</li> <li>To control pests in vegetable crops</li> </ul>
3	Pulses	Mixing of dry neem leaves with pulses	Neem leaves act as repelling agent for insects.

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

Nil

### 10.G. Field activities

i. Number of villages adopted : 19ii. No. of farm families selected : 34

iii. No. of survey/PRA conducted: 06 (Siddanuru, Hosachikkanahalli, Avaragere, Halebisleri, Naganuru, Belavanuru)

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

Status of establishment of Lab : Sanctioned, Funds awaited

1. Year of establishment :

2. List of equipments purchased with amount :

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

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

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

### Details of samples analyzed during the reporting period

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized
Soil Samples	14	14	14	1750=00
Water Samples	03	03	03	150=00
Plant samples				
Manure samples				
Others (specify)				
Total	17	17	17	1900=00

### PART XII IMPACT

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

Name of specific	No. of	% of adoption	Change in income (Rs.)	
technology/skill transferred	participants		Before	After
			(Rs./Unit)	(Rs./Unit)

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

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

Nil

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

A study on Impact of training programme on "Production of Vermicompost and its importance in Agriculture"

### **Introduction and Methodology:**

A study was conducted to analyze the *impact of training* among the farmers of Kurki village of Davanagere taluk. The village has 1000 families with majority of land being irrigated. The major crops of the village were Paddy, Maize, Jowar, Sugarcane, Arecanut, Coconut and Banana. Farmers are using fertilizers to grow crops and only few farmers are using farm yard manure (FYM) based on the availability. There exist major scope for vermicompost production in this village, considering crops grown and the availability of biomass (agricultural waste for the production of vermicompost viz. paddy straw and husk, sugarcane trash, Arecanut and Coconut leaves etc.) with this background, Taralabalu Krishi Vigyan Kendra has taken up training programmes on 'Production of vermicompost and its importance in Agriculture' during the year 2005 and 2006. 45 potential farmers from the village were randomly selected and were trained to impart necessary skill in production of vermicompost. Present study was taken up in August 2009 after three years of training to analyze the impact of training on "Production of vermicompost and its importance in Agriculture".

Training title	Date	No. of farmers
Production of vermicompost and its importance in	19-09-2005	45
agriculture	and	
	23-01-2006	

The study was conducted using structured schedule and 45 farmers were asked to answer the questions. The data collected was analyzed and the results were tabulated using percentage and numbers.

### **Results and Discussion:**

The results of the study were tabulated and presented in number and percent basis

Table-I: Knowledge of farmers in production of vermicompost before the training

(n=45)

Yes		No	
Numbers	Percentage (%)	Numbers	Percentage (%)
01	2	44	98

Table-II: No. of farmers who felt the training was useful

(n=45)

Useful		Not useful	
Numbers	Percentage (%)	Numbers	Percentage (%)
45	100	0	0

Table-III: Number of farmers adopted the technology

(n=45)

Adopted		Adopted and discontinued		Not adopted	
Numbers	Percentage (%)	Numbers	Percentage (%)	Numbers	Percentage (%)
06	13	13	29	26	58

Majority (98%) of the farmers said that they don't have knowledge of vermicompost production prior to the training programme Table-I.

Table-II reveals that cent percent farmers felt that the training programme was useful, but still yet only (Table-III) 13% adopted the technology and 29% of the farmers have been discontinued after adopting the technology. The reasons quoted by these farmers are lack of labour, support and motivation, follow-up and water problem in summer. Majority of the farmers (58%) have not adopted the technology at all, reasons for this are no place for construction of vermicompost unit around their homes, water facilities, labour problem (High cost of labour), lack of motivation and absence of cows and buffalos.

### **Summary:**

Although cent percent of the farmers felt that training on 'Production of vermicompost and its importance in agriculture' was useful majority of farmers have find it difficult to adopt the technology. Repeated follow up visits and subsidized support to the farmers for sustained production will definitely help discontinued and non-adopters to adopt the technology. In this background Taralabalu Krishi Vigyan Kendra has planned to conduct Ex-trainees training programme on 'Production of vermicompost and its importance in agriculture' to farmers of Kurki village.

# PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage	
Department of Animal Husbandry and Veterinary Science, Davanagere	Trainings, animal health camp, Input for FLD	
Department of Agriculture, Davanagere	Trainings to the farmers, field visits, diagnostic field visits, bi-monthly meetings and agriculture surveys	
Department of Horticulture, Davanagere	Trainings to the farmer, field visits, diagnostic field visit	
Department of District Watershed Development, Davanagere	Trainings	
Department of fisheries, Davanagere	Trainings to the farmer, field visits	
Department of forestry, Davanagere	Supply of forest seedlings	
Department of Women and Child Welfare Department, Davanagere	Trainings to the SHGs and Anganawadi workers	
Karnataka state seed corporation	Supply of seed materials for FLDs	
Department of social welfare.	Programme participation	
District statistical information centre	Collection of basic information of the district	
KRVP, Bangalore	Environmental awareness campaign	
Canara Bank, State Bank Of India, Shiva Sahakari Bank, NABARD	SHGs A/c and KVK A/c	
Karnataka oilseeds federation.	Supply of seed material for FLDs and trainings to the farmers	
University of Agricultural Sciences, Bangalore and Dharwad	Technology transfer, knowledge update and bi-monthly meetings	
Indian Institute of Horticulture Research, Bangalore	Trainings, supply of seed materials and technical support	
JSYS, CBTMPCS (UAS-B)	Trainings	

# 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.)
"Establishment of Rural Bio Resource Complex for Sustainable Rural Livelihood Security Through Bio-technological Approaches in Davanagere district of Central Karnataka"		Department of Biotechnology, New Delhi	26.684 lakhs

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

a) Is ATMA implemented in your district Yes

S. No.	Programme	Nature of linkage	Remarks
1.	Technology Week	Seminars	Financial support for logistics

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

S. No.	Programme	Nature of linkage	Constraints if any

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

S. No.	Programme	Nature of linkage	Remarks
1	Training	Conducted 2 training programme during 2007-08	2 training programmes have been completed with 50
1.		Conducted 2 training programme during 2007-08	participants

# PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl.		Year of	Aron	I	Details of production		1	Amount (Rs.)	
No.	Demo Unit	establishment	Area (ha)	Variety	Produce	Qty.	Cost of inputs	Gross income	Remarks
01	Vermicompost	JULY -2008	15 ft X 50 ft	Eudrilus	Vermicompost	5427kg			
				euriginae					
							16720-00	90345-50	

# 13. B. Performance of Instructional farm (Crops) Including seed production

Sl.	Name of crop	Date of	Date of	Area/ha.	Deta	ils of product	ion			
No.		Sowing	harvesting		Variety	Type of production	Quantity	Cost of input (Rs.)	Gross income	Remark
1.	Cereals Ragi	18-07-2009	30-10-2009	0.5	GPU-28	Seed	1.3 q	1000	800-00	
2.	Navane	19-07-2009	28-10-2009	0.2	STA-326	Seed	0.5 q	1000-00	500-00	
3.	Paddy	13-01-2010	01-04-2010	1.5	JGL-1798	Seed	0.45 q	24000-00	33000-00	
4	Pulses cowpea	23-01-2010	06-05-2010	2.0	C-152	Seed	0.6 q	18000-00	19000-00	
5	Redgram	10-06-2009	15-12-2009	1.0	Hydrabada- 3C	Seed	0.4 q	1000-00	1200-00	
6	Vegetables Okra	23-11-2009	30-4-2010	1.5	African dwarf	Seed	3 q	18000-00	21000-00	
8	Vegetables:									
	Ridge gourd	01-06-2009	29-12-2009	0.1	Commercial	Vegetative	0.53 q	198-00	280-00	
9	Cucumber	01-06-2009	20-10-2009	0.1	Commercial	Vegetative	0.47 q	211-50	250-00	
10	Bitter gourd	05-06-2009	30-12-2009	0.1	Commercial	Vegetative	0.14 q	140	200-00	
11	Bottle gourd	05-06-2009	30-12-2009	0.1	Commercial	Vegetative	0.23 q	138	198-00	
12	Tomato	15-06-2009	25-10-2009	0.5	Commercial	Vegetative	300 q	2700	3000-00	
13	Brinjal	15-06-2009	28-10-2010	0.5	Commercial	Vegetative	4.11 q	2055	2500-00	
14	Chilly	15-06-2009	30-10-2009	0.5	Commercial	Vegetative	1.93 q	1930	2000-00	
15	Cotton	19-05-2009	08-01-2010	0.5	Bt.	Lint	3.8 q	9000	11020-00	
16	Maize	25-05-209	05-10-2009	2.0	Commercial	Seed	51 q	33385	41000-00	

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

S1.			Amou	int (Rs.)	
No.	Name of the Product	Qty	Cost of inputs	Gross income	Remarks
1	Trichoderma	75 kg		5625	

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

Sl.	Name	D	etails of production		Amour	nt (Rs.)	
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
1.	Cattle	HFx Jr x	Milk	6000 lts	60000-00	90000-00	-
		Kankarej					
2.	Ornamental fishes	Gambusia Guppy	Fish fingerlings	248		1240	Sold to general public
3.	Fish culture demo pond	Indian major carps and Chinese carps	Grow out fish	51 kg		1540	Sold to local market

### 13.E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2009	-	-	
May 2009	-	-	
June 2009	129	08	
July 2009	136	07	
Aug. 2009	144	08	
Sept. 2009	65	04	
Oct. 2009	201	10	
Nov. 2009	165	09	
Dec. 2009	129	07	
Jan. 2010	59	03	
Feb. 2010	235	22	
March 2010	200	19	
Totol	1463	97	

# 13.F. Database management

S. No	Database target	Database created
1.	Trainings	On going

### 13.G. Details on Rain Water Harvesting structure and micro-irrigation system: Not applicable

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.		Activities conducted					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.)		

# PART XIV - FINANCIAL PERFORMANCE

Bank Account	Name of the Bank	Location	Branch Code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute :	Canara Bank	Vidyanagar, DAVANAGERE - 577004	1813	Taralabalu Rural Development Foundation	101143	Yet the Branch to get	CNRB 0001813
With KVK :	State Bank of India	P.J. Extension, DAVANAGERE - 577002	5624	Taralabalu Krishi Vigyan Kendra	30166599498	577002002	SBIN 0005624
	Canara Bank	Vidyanagar, DAVANAGERE - 577004	1813	Taralabalu Krishi Vigyan Kendra (Salary)	10144	Yet the Branch to get	CNRB 0001813
	Canara Bank	Vidyanagar, DAVANAGERE- 577004	1813	Taralabalu Krishi Vigyan Kendra (Activities)	10145	Yet the Branch to get	CNRB 0001813

14.B.	Utilization of Funds up	nder FLD on Oilseeds	(Rs. in Lakhs)
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Opening Balance as on 1.4.2009 Rs.	-0.110
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	Sanction	by ICAR	Expen	Unspent	
Items	Kharif 2009	Rabi 2009-10	Kharif 2009	Rabi 2009-10	Balance as on 31.3.10
	GN: 5	SN: 10	GN: 5	SN: 10	
	ha	ha	ha	ha	
Inputs	0.175	0.350	0.175	0.072	0.278
Extension Activities	0.025	0.050	0.025	0.050	0.000
TA/DA/POL	0.037	0.075	0.037	0.073	0.002
Total	0.237	0.475	0.237	0.195	0.280

**Grant Released during the Year** 

0.237

Closing Balance as on 31.3.2010

Rs. -0.305

14.C. Utilization of Funds under FLD on Pulses (Rs. in Lakhs)					
Opening Balance as on 1.4.2009	Rs.	-0.682			

	Sanction	Sanction by ICAR		Expenditure		
Items	Kharif 2009	Rabi 2009-10	Kharif 2009	Rabi 2009-10	Balance as on 31.3.10	
	RG: 10	BG: 15	RG: 10	BG: 15		
	ha	ha	ha	ha		
Inputs	0.350	0.525	0.243	0.000	0.632	
Extension Activities	0.050	0.075	0.050	0.000	0.075	
TA/DA/POL	0.075	0.112	0.075	0.000	0.112	
Total	0.475	0.712	0.368	0.000	0.819	

**Grant Released during the Year** 

0.712

Closing Balance as on 31.3.2010

Rs. -0.338

14.D. Utilization of Funds under FLD on Cotton [Prod. Tech]					
Opening Balance as on 1.4.2009			Rs.	0.003	
	Released by ICAR		Expenditure		Unspent
Items	Kharif 2009	Rabi 2009- 10	Kharif 2009	Rabi 2009-10	Balance as on 31.3.10
Cotton : 50 Acres					
Essential Inputs @ Rs.1400 Per Demon. Per					

1.050

0.450

1.500

**Grant Released during the Year** 

POL/Veh. Hiring / Meals / Printed Materials, etc. @

Acre

Total

Rs.600/Acre

1.403

0.144

0.000

0.144

0.906

0.450

1.356

Closing Balance as on 31.3.2010	Rs.	0.05
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Utilization of Funds under FLD on Cotton [Farm Implements]						
Opening Balance as on 1.4.2009 R					0.090	
	Released by ICAR		Expenditure		Unspent	
Items	Kharif 2009	Rabi 2009- 10	Kharif 2009	Rabi 2009-10	Balance as on 31.3.10	
Purchase of New Equip.s Contingency for Demon. of		0.000		0.000	0.000	
already provided equipments		0.000		0.000	0.000	
Total	0.000	0.000	0.000	0.000	0.000	
Closing Balance as on 31.3.2010 Rs.					0.090	

14	.E.	Utilization of KVK Funds during the	Year 2009-10 [Rup	ees in lakhs]	:
Op	enin	g Balance as on 01.04.2009			0.75
SI.		Particulars	Sanctioned	Released	Expenditure
A	_	curring Items :			
1	_	/ & Allowance	37.00	36.24	37.00
2		velling Allowances	1.00	1.00	1.00
	_				
3	Cor	ntingencies :	9.00	9.00	8.08
	i	Office Contingency	2.10	2.10	2.10
	ii	POL/Repair of Vehicles	1.75	1.75	1.75
	iii	Stipend / Meals for Trainees	1.05	1.05	1.04
	iv	Teaching / Demonstration Materials	0.65	0.65	0.65
	V	FLD (Other than Oilseeds & Pulses)	2.20	2.20	1.52
	vi	OFT	0.50	0.50	0.29
	vii	Training to Extension Functionaries	0.10	0.10	0.09
	viii	Farmers Field School	0.25	0.25	0.24
	ix	Exension Activities	0.30	0.30	0.30
	Х	Maitenance of Library	0.10	0.10	0.10
		Total - 'A'	47.00	46.24	46.08
В	Noi	 n Recurring Items :			
1	Wo		0.00	0.00	0.00
2		ipments (Power Tiller + Cultivator)	1.70	1.70	1.69
2		ce Furniture	0.00	0.00	0.00
3		ablishment of Library	0.00	0.00	0.00
		Total - 'B'	1.70	1.70	1.69
		REVOLVING FUND - 'C'	0.00	0.00	0.00
		TOTAL (A+B+C)	48.70	47.94	47.77
Cl	osing	g Balance as on 31.03.2010			0.92

# 14.F. Status of Revolving Fund (Rs. in Lakhs):

Year	Opening Balance as on 1.04.2004	Income During the Year	Expenditure During the Year	Net Balance in Hand as on 1st April of each Year
April 2004 To March 2005	0.000	1.000	0.000	1.000
April 2005 To March 2006	1.000	0.008	0.681	0.327
April 2006 To March 2007	0.327	2.203	1.977	0.553
April 2007 To March 2008	0.553	6.142	6.277	0.418
April 2008 To March 2009	0.418	3.075	2.843	0.650
April 2009 To March 2010	0.650	10.072	10.038	0.684