# **Annual Progress Report 2013-14**

# (FOR THE PERIOD APRIL 2013 TO MARCH 2014)

#### **Submitted to:**

Zonal Project Director
Zonal Project Directorate, Zone-VIII
ICAR, MRS, Hebbal, Bangalore

#### **Submitted by:**

Taralabalu Krishi Vigyan Kendra, Davanagere

Kadalivana, LIC Colony Layout, B.I.E.T. Road

Davanagere - 577 004

Phone: 08192-263462, Fax: 08192-260969

Email: dvgtkvk@yahoo.com

Website: www.taralabalukvk.com

#### PART I - GENERAL INFORMATION ABOUT THE KVK

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

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

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

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

#### 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 31st March 2014)

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 Coordinator	Dr. Devparaja T.N.	Programme Coordinator	M	Fisheries	Ph.D. (Aquatic Microbiology)
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 Nutrition)
5	Subject Matter Specialist	Mr. Raghuraja J.	Subject Matter Specialist	M	Agricultural Extension	M.Sc. (Agri.)
6	Subject Matter Specialist	Mr. Prasanna Kumara N.	Subject Matter Specialist	M	Plant Protection (Pathology)	M.Sc. (Agri.)
7	Subject Matter Specialist	Mr. Sannagoudra H.M.	Subject Matter Specialist	M	Soil Science	M.Sc. (Agri.)
8	Programme Assistant ( Lab Tech.)/T-4	Mr. Revanasiddappa G.B.P.	Programme Assistant (Lab Tech.)	M	Lab Technician	M.Sc. (Agri.)
9	Programme Assistant (Computer)/ T-4	Mr. Santhosh B.	Programme Assistant	M	Computer	B.Sc. (Computer Science)
10	Programme Assistant/ Farm Manager	Mr. Vijayakumar S.B.	Programme Assistant	M	Farm Manager	M.Sc. (Plant Breeding & genetics)
11	Assistant	Mr. Mallikarjuna S.Gudihindala	Assistant	M	Accounts	B.Com.
12	Jr. Stenographer	Mrs. Mamatha H. Melmalagi	Stenographer-III	F	Stenographer-III	B.Com. + Shorthand
13	Driver	Mr. Marulasiddaiah N.M.	Driver	M	Jeep Driver	BA
14	Driver	Mr. Shivakumara S.	Driver	M	Tractor Driver	S.S.L.C.
15	Supporting staff	Mr. Shivakumara B.	Supporting staff	M	Office Assistant	S.S.L.C.
16	Supporting staff	Mr. Shivakumara S.E.	Supporting staff	M	Field Assistant	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.	37400-67000	41720/-	17-05-2005	Permanent	Others
Mr. Basavanagowda M.G.	15600-39100	20440/-	21-11-2006	Permanent	Others
Mr. Mallikarjuna B.O.	15600-39100	19680/-	09-01-2008	Permanent	Others
Dr. Jayadevappa G.K.	15600-39100	19680/-	29-01-2008	Permanent	Others
Mr. Raghuraja J.	15600-39100	18950/-	23-06-2008	Permanent	Others
Mr. Prasanna Kumara N.	15600-39100	18950/-	24-06-2008	Permanent	Others
Mr. Sannagoudra H.M.	15600-39100	15600/-	01-07-2013	Permanent	Others
Mr. Revanasiddappa G.B.P.	9300-34800	9710/-	11-04-2012	Permanent	Others
Mr. Santhosh B.	9300-34800	11470/-	05-09-2008	Permanent	Others
Mr. Vijayakumar S.B.	9300-34800	11470/-	23-06-2008	Permanent	Others
Mr. Mallikarjuna S.Gudihindala	9300-34800	14530/-	01-06-2005	Permanent	Others
Mrs. Mamatha H. Melmalagi	5200-20200	10310/-	26-06-2005	Permanent	Others
Mr. Marulasiddaiah N.M.	5200-20200	8050/-	01-06-2005	Permanent	Others
Mr. Shivakumara S.	5200-20200	8050/-	01-06-2005	Permanent	Others
Mr. Shivakumara B.	5200-20200	7100/-	01-06-2005	Permanent	Others
Mr. Shivakumara S.E.	5200-20200	7100/-	01-06-2005	Permanent	Others

#### 1.6. Total land with KVK (in ha): 15 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.75
2.	Under Demonstration Units	0.50
3.	Under Crops	7.25
4.	Orchard/Agro-forestry	5.0
5.	Others	0.5
		15

### 1.7. Infrastructural Development:

# A) Buildings

		Source Stage						
S.	Name of building	of		Complete	J		Incomplete	
No.	Name of building	funding	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	04.01.2008	550	29.37			Completed
2.	Farmers Hostel	ICAR	04.01.2008	300	18,82,000.00			Completed
3	Plant Health Clinic	ICAR	01.04.2012		10,00,000.00			Completed
4.	Staff Quarters	ICAR	04.01.2008	400	19,40,000.00			Completed
	1. Programme Coordinator							
	2 .SMS (Animal Science)							
	3. SMS (Agri. Extension)							
	4. Farm Manager							
	5. Office Assistant							
	6. Driver (Jeep)							
5.	<b>Demonstration Units</b>							
	1. Dairy with modern facilities	ICAR	04.01.2008	160	6,41,000.00			Completed
	2. Shade Home	DBT	29.03.2013	1000	2,10,000.00			Completed
	3. Zero Energy Cool Chamber	DBT	1.12.2010	2.5	13,000.00			Completed
	4. Azolla bulk production unit	RF	2010	3	3,000.00			Completed
	5. Azolla production unit	NICRA	28.03.2013	3.53	20,000.00			Completed
	6. Ornamental fish breeding unit	DBT	2010	700	1,49,955.00			Completed
	7. Fish polyculture pond with horti integration	DBT	2010	600				Completed
	8.Portable Carp hatchery	ICAR	31-03-2011		2,25,000-00			Completed
	9.Fodder demo units	RF	2010	4000	41,428.00			Completed
	10. Erythrina standards for betelvine demo unit	RF	2010	300	1000.00			Completed
	11. Biogas unit	RF	2011	04	29920.00			Completed
	12. Fish cum paddy cultivation unit	RF	2011	421	13071.00			Completed
	13. Vermicomposting units	RF	2008	121	60000			Completed
	14 .Vermicomposting unit	DBT	2010	60	15000			Completed

6.	Orchards and agro forestry						Completed
	1. Mango	RF	2000	12000	53215.00		Completed
	2. Sapota orchard	RF	2010	4000	44775.00		Completed
	3. Hexagonal and penta planting of coconut garden, Germ plasm coconut	RF	2009	4000	9035.00		Completed
	4. Arecanut garden	RF	2007	8000	72228.00		Completed
	5.Tarmarind garden, Medicinal plants	RF	2000	2000			Completed
	6.Curry leaf garden	RF	2007	500			Completed
	7. Agro forestry with biofuel plants	RF	2000	24000	13166.00		Completed
7.	Fencing	ICAR	31-03-2011	930 feet	11,0000-00		Completed
8.	Rain Water harvesting system					To be sanctioned	
9.	Threshing yard	ICAR	31-03-2011		2,00,000-00		Completed
10.	Farm Godown	ICAR				To be sanctioned	
11.	Bore wells (2 No.s)	ICAR	31-03-2011		3,00,000-00		Completed
12.	Irrigation system	ICAR	31-03-2011		1,00,000-00		Completed
13.	Borewell recharge unit	RF	01-06-2011		64,585-00		Completed

# B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor and Trailer	2005	4,99,995-00	2684 hours	Good
Power tiller Funded by FLD cotton	2008	99400-00		Good
Power Tiller	2010	131500-00		Good
Tempo Cruiser	2005	4,99,250-00	177286	Good
Hero Honda CD Deluxe	2006	39,298-00	50026	Good
Yamaha Alba	2009	48,309-00	36279	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
Deep Freezer + Stabilizer (Funded by ATMA)	2013	16,650/-	Good
Computer +LCD	2007	1,00,103/-	Good
Fax (4 in one)	2009	15,000/-	Good
Generator	2011	100000/-	Good

# 1.8. Details SAC meeting conducted in 2013-14

Sl. No.	Date	Number of	No. of	Salient Recommendations	Action taken
		<b>Participants</b>	absentees		
1	2	3	4	5	6
1	16-01-2013	24	05	Suggested to indicate thrust areas	Based on group meetings in cluster villages, discussing with development departments and based
					on problems of farmers visiting KVK, the thrust areas had been identified
2				Suggested to arrange the visit of SAC members to	Accordingly on 8-2-2013 the visit was arranged to
				NICRA village to see the activities	NICRA village to observe the activities.
3				Suggested to grow different varieties of banana	High density banana planting of G-9 tissue variety
				scientifically	demonstrated. Tissue culture variety of Yalakki
					Banana is grown other varieties namely,
					Nanjanagudu rasabale and bhudu rasabale planted.
4				Suggested to popularize the schemes of	Personnel from development departments were
				development the benefit of farmers	invited in all the trainings and extension programmes
					of KVK and the schemes were explained to the
					farmers.

1	2	3	4	5	6
5	16-01-2013	24	05	Suggested to work in collaboration with ATMA project	Project on 'Fish fingerlings production' is going on since 2 years, organized 'Agriculture technology week' celebration and participated in Krishi Mela organized by UAHS, Shimog in collaboration with ATMA.
6				Suggested to carryout KVK activities in all 6 taluks.	Accordingly cluster villages in all 6 taluks were identified and FLD's, OFTs and other extension activities were taken up during 2013-14 and in 2014-15, 6 villages in each taluk were selected to carryout KVK activities.
7				Suggested to conduct impact studies of important KVK activities	Impact studies for important KVK activities are conducted and it will be continued. It is planned to bring out a booklet on impact studies, case studies and success stories.
8				Suggested to introduce coloured broilers	Advisories for introduction of red broilers, Giriraja and Swarnadhara birds were given to the farming.
9				Suggested to popularize poultry manure	Farmers advisories and in extension activities the usefulness of poultry manure were explained to promote its usage.
10				Suggested to give more importance to annual fodder	Introduced multicut annual fodders to farmers by involving Advanta Company (Nutri feed, sugar graze etc). The same has been introduced to 30 farmers in DDFA.
11				Suggested to use AIR more effectively in spreading the technology	To popularize KVK technology and also in case of KVK extension activities prior publicity through AIR has been given. During this year 12 programmes by SMS's and 7 programmes by progressive farmers were telecasted.

1	2	3	4	5	6
1	09-01-2014	21	08	Suggested to mention thrust areas by the KVK	Thrust areas are given accordingly.
2				To arrange visit to NICRA village for all SAC members.	Visit to NICRA village was arranged on 5 <sup>th</sup> February 2013. 8 Members attended the same.
3				Suggested to carryout demand driven works	Need based works have been included in the action plan 2013-14.
4				Suggested to cultivate different varieties of banana in KVK farm scientifically.	Planned accordingly.
5				Suggested to prepare list of development department schemes for the benefit of the farmers.	On going.
6				Suggested to work in collaboration with ATMA	On going.
7				Suggested to obtain soil resource map from NBSS and LUP for Davanagere district.	Purchased the soil resource map for Davanagere.
8				Suggested to give importance for all taluks in KVK activities.	All six taluks have been given in the action plan 2013-14.
9				Suggested to analyse impact of demonstrations for continued adoption.	On going.
10				Suggested to introduce coloured broilers.	On going.
11				To popularize poultry manure.	On going.
12				Suggested use AIR effectively to popularize KVK activities.	On going.
13				Popularize silage making technology	On going.
14				To encourage farmers for annual fodder crops.	On going.
15				Suggested to popularize use of bio pesticide.	On going.
16				Suggested to conduct few impact studies on the trainings conducted.	On going.
17				To work on market linkages.	On going.

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

#### 2.1 Major farming systems/enterprises:

Sl. No	Farming system/enterprise							
1	Rainfed system: Maize, Maize+Redgram, Ragi, Ragi+Horsegram, Greengram-Ragi, Minor millets, Jowar, Bengalgram, Redgram,							
	Groundnut, Sunflower, Cotton, Mango.							
2	Irrigation (33%): Rice- Rice, Sugarcane, Arecanut, Banana, Coconut, Papaya, Vegetable crops, Fodder crops, Pomegranate							
3	Enterprises: Poultry, Dairy, Sheep/ Goat rearing, Fisheries, Vegetable nursery, Nursery							
4	Cropping intensity: 122%							

Taralabalu Krishi Vigyan Kendra is situated in Davanagere district of Karnataka state. The district occupies a total geographical area of 5913.4 sq. km. It is spread over 6 taluks consisting 35 hoblies and 232 gram panchayaths. According to 2011 census, the district comprises total population is 19,46,905 with population density of 329 people /sq. km. The district is primarily agrarian in character and more than 75% of its population depending directly / indirectly on agriculture for their livelihood. Literacy rate in the district is 75.74% (2011 sensus).

Davanagere district is at center of the state and lies in between latitude of 75°.30' and 76°.30' and longitude of 13°.45' and 14°.50' with MSL of 602.5 m. The annual average rainfall of the district is 656.9 mm (Actual 495.5 mm 2012). The variety of soil is medium to deep black and red sandy loam (Details in section 2.2). The district is essentially Kharif region and majority Rabi crops will be taken up with the help of irrigation from lower Bhadra canal. (Irrigation -33%) The district comprises of three agro climatic zones of Karnataka as given in section 2.3.

# 2.2 Description of Agro-climatic Zone & major agro ecological situations:

Sl. No	Agro-climatic Zone	Characteristics		
1	Northern Dry Zone (Zone III)	The zone comprises Harapanahalli Tq. Major soil types of the zone are black and red soils. 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 mil		
		Vegetables, Coconut, Arecanut, Beetlevine, Groundnut, and Pomegranate.		
3	Southern transitional Zone	Southern transitional zone includes Channagiri and Honnali taluks. The dominating soil types found are red sandy soil		
	(Zone VII)	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, Davanagere, Harapanahalli)	High water holding capacity	54,000
		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. (a) Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Rice	106200	468195	4563
2	Jowar	24500	51450	2100
3	Ragi	14200	33160	2335
4	Maize	170250	752925	4422
5	Bajra	1000	1288	1288
6	Wheat	900	1100	1222
7	M.Millets	1100	885	805
I	<b>Total Cereals:</b>	314550	1309003	4162
1	Tur	1200	13700	1142
2	Bengalgram	5500	5550	1009
3	Horsegram	1700	680	400
4	Blackgram	500	450	900
5	Greengram	800	640	800
6	Cowpea & other	4100	3770	920
7	Avare	2950	2455	832
8	Mothbean (madaki)	300	150	500
II	Total Pulses:	27850	27395	984
	<b>Total Foodgrains:</b>	342400	1336398	3903
1	Groundnut	27000	40600	1504
2	Sesamum	1800	810	450
3	Sunflower	15050	17545	1166
4	Castor	1500	1650	1100
5	Niger	1250	513	410
6	Mustard	650	310	477
7	Soyaben	200	220	1100
8	Safflower	500	350	700
9	Linseed	50	25	500
III	<b>Total Oilseeds:</b>	48000	62023	1292
IV	Commercial Crops:			
1	Cotton	40000	92824	395
2	Sugarcane Planted	3500	410000	117
2a	Sugarcane Ratoon	4500	465000	103
3	Tobacco (VFC)	600	2647	4412
	GRAND TOTAL	439000		

(Source: Department of Agriculture, Davanagere. 2012-13)

#### 2.4. (b) Area, Production and Productivity of Horticulture crops in the district

S.	Crop	Area (ha)	Production	Productivity
No			(Metric tons)	(t /ha)
1	Mango	3794.85	33938.84	8.94
2	Banana	3851.5	76207.04	19.79
3	Lemon	135.21	1369.20	10.13
4	Sapota	924.7	8769.88	9.48
5	Pomegranate	218.75	965	4.41
6	Papaya	169.5	7951.5	46.59
7	Tomato	3997	68966.5	17.25
8	Brinjal	267	3822	14.32
9	Beans	377	1993	5.29
10	Onion	4176	61052	14.62
11	Chilli	1172	18057	15.14
12	Bendi	344	1657.5	4.82
13	Cabbage		2560	
14	Radish	171	1440	8.42
15	Beetroot	58	898	15.48
16	Drumstick	104	341.2 Lakhs pod	3.28
17	Watermelon	268	5962.0	22.25
18	Bitterguard		749	
19	Ridge gourd		967.63	
20	Cucumber			
21	Coconut	12674	1752.77 Lakh nuts	0.1383
22	Arecanut	34466	66712	1.94
23	Betelvine	1005.15	4459.40	4.74
24	Oil palm	1739.79	6451.11	3.17
25	Turmeric	88	66	0.75
26	Cocoa	610.50	190.70	0.31
27	Jasmin	189.93	1159.45	6.10
28	Marigold	521	2857	5.48

(**Source:** Department of Horticulture: 2012-13)

#### 2.5. Weather data

Month	Rainfall (	mm) (2013)	Temperature	e <sup>0</sup> C (2013) **	Relative Humidity **	
			Mean Maximum °C	Mean Minimum °C	Maximum	Minimum
	Actual *	Normal	Actual	Actual		
January-2013	1.2	1.9	32.1	16.0	75.4	27.9
February -2013	4.5	1.3	32.1	16.5	79.6	29.4
March- 2013	22.3	4.1	35.2	20.4	89.9	22.3
April-2013	33.7	38.8	36.6	21.3	91.3	24.0
May-2013	117.7	84.2	34.5	21.7	92.0	29.0
Jun-2013	97.8	68.0	29.2	21.6	97.3	60.9
July-2013	121.7	98.1	27.1	21.5	99.4	71.8
August-2013	72.4	79.5	25.7	21.6	95.6	70.0
Septmber-2013	136.7	114.5	30.1	21.8	87.8	70.5
October-2013	63.0	119.3	30.3	21.2	96.8	47.7
November-2013	7.3	40.4	29.8	14.9	85.2	29.5
December-2013	0.3	7.0	29.8	14.9	85.2	29.5
Total	678.5	656.9				

## 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2007)

Category	Population	Production	Productivity
Cattle			
Crossbred	111371		5-6 liter/day
Indigenous	283752		
Buffalo	223601		
Sheep	•		
Crossbred	22		
Indigenous	333435		
Goats	153940		
Pigs			
Crossbred	01		
Indigenous	6492		

<sup>\*</sup> Dept. of Agriculture, Davanagere \* \* Source: NICRA-AWS, Davanagere

Rabbits	170	
Poultry		
Hens	2054012	 
Desi		 
Improved Ducks		 
Ducks		 
Turkey and others		 

Category	Area	<b>Production (tons)</b>	Productivity
Fish			
Marine			
Inland		16052.53	
Prawn			
Scampi			
Shrimp			

(**Source:** Department of statistics, Davanagere : 2012-13)

### 2.7 District profile has been Updated for 2013-14: Yes

### 2.8 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	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	2	3	4	5	6	7	8
1	Davanagere	Hale Bathi	Elebethur Hale Bathi Hosa Bathi Naganuru Gopanahal	2 Year	Rice	<ul> <li>Labours for timely transplanting</li> <li>No. of seedling / sq. m is around 30-35.</li> <li>Improper nutrient management Low yield</li> </ul>	ICM
2	Harihara	Devarabellakere	Devarabellakere	1 Year		<ul> <li>Weed Management</li> <li>No seedling treatment with biofertilizer</li> <li>No/less ZnSO<sub>4</sub> application</li> <li>Higher incidence of stem borer</li> <li>Cost of production</li> <li>Higher incidence of sheath blight</li> </ul>	
3	Jagalur	Hanumathapura	Hanumanthapura	1 Year	Maize	<ul> <li>No seed treatment with bio fertilizers (Azosprillium)</li> <li>No intercropping with pulses</li> <li>Thick plant population (increased seed rate)</li> <li>Stem borer</li> <li>Low yield</li> </ul>	ICM
4	Channagiri	Billahalli	Billahalli Donihalli	1 Year	Ragi	<ul> <li>Poor fodder quality</li> <li>Low yield (3-4 q / acre)</li> <li>Higher seed rate (30 kg / acre)</li> <li>Improper nutrient management (no bio fertilizer)</li> <li>Long duration varieties.</li> </ul>	ICM
5	Jagalur	Hanumanthapura	Hanumanthapura	1 Year	Redgram	<ul><li>Low yield due to use of local varieties</li><li>Incidence of pod borer and wilt</li><li>No seed treatment</li></ul>	IPDM
6	Davanagere	Siddanuru	Siddanuru	3 Year	Redgram	Pulse beetle	Post harvest technology

Taralabalu KVK, Davanagere

1	2	3	4	5	6	7	8
7	Davanagere	Alur	Alur Boragondanahalli	2 Year	Groundnut	<ul> <li>Low yielding varieties</li> <li>Low fodder quality</li> <li>Tikka leaf spot and root rot.</li> </ul>	ICM
8	Harapanahalli	Kuremaganahalli	Kuremaganahalli	2 Year	Cotton	<ul> <li>Incidence of aphid, thrips mealy bug, Miridbug and leaf hoppers.</li> <li>Leaf reddening and square drop</li> </ul>	IPM
9	Davanagere	Elebethur	Elebethur	1.5 Year	Sugarcane	Early shoot borer	IPM
10	Harapanahalli	Kuremaganahalli	Kuremaganahalli	2 Year	Arecanut	<ul><li>Higher incidence of bacterial leaf stripe</li><li>No proper drainage</li></ul>	IDM
11	Channagiri	Billahalli	Billahalli Donihalli Santhebennur	3 Year	Arecanut	<ul><li>Hidimundige syndrome</li><li>Improper nutrient management</li></ul>	ICM
12	Honnali	Honnali	Machigondanahalli S.Mallapura	1 Year	Tomato	<ul> <li>Fruit cracking</li> <li>Incidence of TLCV, bacterial wilt, early blight</li> <li>Lack of grading techniques</li> </ul>	ICM
13	Davanagere	Davanaere	Siddanuru		Mango	<ul> <li>Flower dropping</li> <li>Low yield</li> <li>Uneconomical trees</li> <li>Age old orchards</li> </ul>	
14	Channagiri	Billahalli	Doddabigere	1 Year	Mango 2012-13	Stem borer	IPM
15	Davanagere	Elebethur	Chikkanahalli	7 Year	Banana	<ul> <li>Sigatoka leaf spot</li> <li>Panama wilt</li> <li>Micronutrient deficiency leading to lower bunch weight</li> <li>Low planting density</li> </ul>	ICM
16	Harapanahalli	Kuremaganahalli	Kuremganahalli	2 Year	Coconut	<ul> <li>Coconut Black Headed Caterpillar and Mites</li> <li>Poor utilization of interspace</li> <li>Dropping of immature nuts</li> </ul>	Popularization of KDM-1 Drumstick as intercrop

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1	2	3	4	5	6	7	8
17	Harapanahalli	Kuremaganahalli	Kuremganahalli Punabagatta Kambattahalli Nandikamba Uchangidurga Elebethur	2 Year	<ul> <li>Buffalo &amp; cattle rearing</li> <li>Sheep and goat rearing</li> <li>Rearing local birds</li> </ul>	<ul> <li>Lower and unhygienic milk production</li> <li>Repeat breeding in dairy animals</li> <li>Uterine prolapse in pregnant animals</li> </ul>	<ul> <li>Balanced feeding in dairy animals.</li> <li>Nutritional &amp; worm load.</li> <li>Breeding</li> </ul>
18	Davanagere	Davanagere	Devarahatti Chattobanahalli Mallenahalli Kanakabasapura Chikkaarkere	2 Year	Fisheries (2013-14)	Mono cropping; reduced income in regular crops like rice and maize per unit area	Polyculture of fishes
19	Davanagere	Davanagere	Devarahatti Nagarakatte Shyagale Mayakonda Alur Yalavatti Kukkuwada Mallanayakanahalli	2 Year	Fisheries (2012-13)	Mono cropping; reduced income in regular crops like rice and maize per unit area	Integrated Fish Farming
20	Davanagere	Davanagere	Kukkuwada	1 Year	Fisheries (2012-13)	Reduced farm income	Ornamental fish production

### 2.9 Priority thrust areas

Sl. No.	Thrust area
1	Integrated crop management in Rice, Maize, Ragi, Groundnut, Tomato, Arecanut, Banana and Coconut
2	Integrated pest management in Redgram, Sugarcane, Cotton and Mango
3	Integrated disease management in Rice and Arecanut.
4	Integrated nutrient management in Banana, Coconut and Arecanut.
5	Post harvest technology
6	Nutritional deficiencies in crossbred dairy cows and buffalos
7	Breeding problems in dairy animals
8	Disease and worm load in livestock
9	Hybrids in poultry.
10	Polyculture of fishes, Integrated Fish Farming, Ornamental fish production

# PART III - TECHNICAL ACHIEVEMENTS

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

	0	FT			FLD				
		1			2	2			
Num	ber of OFTs	Numl	per of farmers	Numb	er of FLDs	Number	Number of farmers  Targets Achievement		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
03 (2013-14)	03	17	17	14 (2013-14)	14	127 (2013-14)	127		
01 (2011-12)	01	05	05	04 (2012-13)	04	34 (2012-13)	34		

	Tra	aining		Extension Programmes			
		3		4			
Numl	Number of Courses		of Participants	Number o	f Programmes	Number	of participants
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
109	109 107		3012	238	306	6050	7726

Seed Pro	duction (Qtl.)	Planting materi	als (Nos.)
	5	6	
Target	Achievement	Target	Achievement
8.6	0.57	Azolla – 100 kg	64.5 kg
		Horticulture seedlings – 13000	5734
		Fodder slips – 1.5 Lakh	11590

Livestock, poultry stra	ins and fingerlings (No.)	Bio-products (Kg)				
	7	8				
Target	Achievement	Target	Achievement			
HFx-05	03	Trichoderma – 100 kg	81 kg			
Ornamental fishes – 5000	1127					

#### 3.B1. Abstract of interventions undertaken based on thrust areas identified for the district:

		G /		Interventions			
Sl. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any		
1	2	2 3 4		5	6		
1	Integrated Crop Management	Rice	<ul> <li>Improper spacing and Non availability of labourers for timely transplanting.</li> <li>Poor mechanization.</li> </ul>		Integrated crop management in Rice with an emphasis on mechanization.		
			<ul> <li>Lack of knowledge on nursery raising for mechanized transplanting.</li> </ul>				
			<ul> <li>Incidence of stem borer.</li> <li>Improper nutrient management (Excess nitrogen application).</li> </ul>				
			• No seedling treatment with biofertilizer and less application of ZnSO <sub>4</sub> .				
2	Integrated Disease Management	Rice	<ul> <li>Higher incidence of sheath blight</li> <li>Closer spacing</li> <li>Indiscriminate use of fertilizers</li> </ul>		Integrated management of sheath blight in Rice		
3	Integrated Crop Management	Maize	<ul> <li>Stem borer</li> <li>Incomplete filling of cobs</li> <li>No micronutrient application</li> <li>Higher seed rate (10kg)</li> <li>No intercropping</li> <li>Poor soil fertility due to excess use of</li> </ul>		Integrated crop management and intercropping Redgram in Maize		
4		D :	chemical fertilizers.				
4	Integrated Crop Management	Ragi	<ul> <li>Non availability of quality seed material.</li> <li>Higher seed rate (30 kg / acre)</li> <li>No inter cropping with pulses.</li> <li>Long duration low yielding varieties.</li> </ul>		Integrated crop management in HYV Ragi (GPU-48)		
			<ul> <li>No seed treatment bio fertilizer</li> <li>Non practicing of spraying of water soluble fertilizers</li> </ul>				

Taralabalu KVK, Davanagere

1	2	3	4	5	6
5	Integrated Pest and Disease Management	Redgram	<ul> <li>Use of local varieties</li> <li>No seed treatment</li> <li>Higher incidence of pod borer and wilt</li> </ul>		Integrated pest and disease management in Redgram
6	Post harvest technology	Redgram 2011-12	Pulse beetle incidence	Management of pulse storage beetle through neem leaves and ginger powder	
7	Integrated Crop Management – Varietal evaluvation	Groundnut	<ul> <li>Use of local variety TMV-2</li> <li>Low yield</li> <li>Lack of awareness on improved varieties.</li> </ul>	Performance assessment of groundnut varieties for better yield.	
8	Integrated Pest Management	Cotton	<ul> <li>Incidence of aphids, leaf hoppers, thrips, miridbug and mealy bug.</li> <li>Leaf reddening and square drop</li> </ul>		Integrated management of sucking pests in Cotton
9	Integrated Pest Management	Sugarcane 2012-13	• Early shoot borer		Integrated management of early shoot borer
10	Integrated Disease management	Arecanut	<ul><li>Higher incidence of bacterial leaf stripe</li><li>No proper drainage</li></ul>		Integrated management of bacterial leaf stripe in young Arecanut plantations
11	Integrated Crop Management	Arecanut	<ul><li> Dropping of immature nuts and splitting of nuts.</li><li> Hidimundige syndrome</li></ul>		Promotion of green manure crop in Arecanut plantations
12	Integrated Crop Management	Tomato	<ul> <li>Fruit cracking</li> <li>Improper micronutrient management</li> <li>Existing hybrids / varieties are susceptible to TLCV, Bacterial wilt and early blight</li> <li>Poor yield</li> </ul>		Integrated crop management in Tomato
13	Integrated Nutrient Management	Mango	<ul><li> Higher flower drop</li><li> Poor fruit set</li><li> Micronutrient deficiency</li></ul>		Foliar application of 'Mango Special' in Mango for enhanced yield.
14	Integrated Pest Management	Mango 2012-13	• Stem borer		Integrated management of stem borer in Mango
15	Integrated Crop Management	Banana	Micronutrient deficiency leading to lower bunch weight		Integrated crop management in Banana

1	2	3	4	5	6		
16	Integrated Crop	Banana	• Low planting density and low income	Modified high density planting			
	Management		per hectare	for increased productivity in			
				Banana			
17	Integrated Crop	Coconut	• Non utilization of interspaces available		Popularization of KDM-1		
	Management		in Coconut garden		Drumstick as intercrop in Coconut		
1.0		<b>~</b>			gardens		
18	Nutritional deficiencies	Dairying	• Lower and unhygienic milk production		Improved management practices		
			in Dairy Animals		in dairy animals for better		
10	N	F		411	performance.		
19	Nutritional deficiencies	Dairying	• Repeat breeding and Uterine prolapsed	Alleviation of Reproductive			
			in the Dairy Animals.	Problems in Dairy Animals			
			• (Reproductive Problems)	through Balanced Nutrition			
20	Polyculture of fishes	Fish	• Reduced farm income and		Polyculture of fishes in big		
		(2013-14)	monocropping		earthen ponds.		
21	Integrated Fish Farming	Fish	• Reduced farm income and		Integrated Fish Farming		
		(2012-13)	monocropping				
22	Ornamental Fish	Fish	• Reduced farm income and		Production of ornamental fishes in		
	Production	(2012-13)	monocropping		backyard for additional income		

### 3.B1. Contd...

					Inte	rventions				
Sl. No	Crop/ Enterprise	Number of Training	Number of Training	Number of Training	Extension activities	Supply of seeds	Supply of planting	Supply of livestock	Supply of bio products  No. Kg  14 15 Pseudomonas fluorescence 12 kg Biofertilizer (Roots-P) - Trichoderma 30 kg	
NO	Enterprise	(farmers)	(Youths)	(extension personnel)	(No.)	(Qtl.)	materials (No.)	(No.)	No.	Kg
1	2	7	8	9	10	11	12	13	14	15
1	Rice	03	01	01	23					
2	Rice	01		01	11					Pseudomonas
										fluorescence
										12 kg
3	Maize	03		02	14	NAH-1137				
						-0.90				
						BRG-2 –				
						0.30				
4	Ragi	03		01	10	GPU-48 –				Biofertilizer
						0.90				(Roots-P)
5	Redgram	01			12	BRG-02 -			-	Trichoderma
						0.3				30 kg
6	Redgram	01			06					
	2011-12									
7	Groundnut	03		01	11	ICGV-				Trichoderma
						9114,				20 kg
						KCG-2 and				
						GPBD-4				
						@ 1.0 each				
8	Cotton	02			12					
9	Sugarcane	01			13					
	2012-13									
10	Arecanut	01		02	10			-		

1	2	7	8	9	10	11	12	13	14	15
11	Arecanut	01			08	Velvet				
						beans – 01				
12	Tomato	03								
13	Mango	01								Mango
										Special 16 kg
14	Mango	01		01	12					
	2012-13									
15	Banana	01			10					Banana
										Special 100
1.0	D	01			06		2666			kg
16	Banana	01			06		2666			
17	Coconut	03	07	01	12		1600			
18	Dairying	02		01	08					• Feeds and
										feed
										supplements
										<ul><li>Veterinary</li></ul>
										medicine
19	Dairying	02		01	07					Vaccine and
										veterinary
										medicine
20	Fish	01		01	04			100000 fish		VM mixture
	(2013-14)							fingerlings		25 kg
21	Fish	02			06			2000 fish		
	(2012-13)							fingerlings		
22	Fish	02			04			200 fish		
	(2012-13)							fingerlings		

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

### **20. Rice**

Sl. No.	T;4]	of Toobn	ology	Som	roo of took	nology	Cn	onlontonn	ico		No. o	of programmes condu		ducted		
S1. NO.	11116	of Techno	ology	Soul	rce of tech	nology	Cr	op/enterpr	ise	OFT	FLD	Training	5	Others (Sp	ecify)	
1		2			3			4		5	6	7		8		
1	Integrated	d Crop Ma	nagement	(	CIAE, Bho	pal		Rice				03		Workshop	-02	
	in Rice with an emphasis mechanization		nphasis on		UAS (B)	)							(	WALMI, DI	narwad,	
	mechaniz	ation												MCF, Davanagere)		
						N	o. of farm	ners covere	d							
	OI	FT			FI	Ĺ <b>D</b>			Tr	aining			Others (Specify)			
Gen	eral	SC	/ST	Gen	eral	SC/	ST	Gen	eral	S	C/ST	Gen	eral	SC	/ST	
M	$\mathbf{F}$	$\mathbf{M}$	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	
				17	03			39	07							

#### 2. Rice

Sl. No.	T;41a	of Toolon	alagy	Com	vaa af taab	malagy	C	an/antaunu	iao		No. o	f programn	nes condi	ucted	
SI. NO.	11116	of Techno	ology	Soul	rce of tech	norogy	Cr	op/enterpr	ise	OFT	FLD	Training	3	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
2	Integrated sheath bli	egrated management of eath blight in Rice			UAS (B)			Rice				01			
	No. of farmers covered														
	OFT FLD							Training Others (Specify)							
Gen	eral	SC	/ST	Gen	eral	SC/	ST	Gen	eral	S	C/ST	Gen	eral	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
				03		02		07							

No. of programmes conducted

#### 20. Maize

GL 37	<b>57.</b> (1)	A.T. 1	_	<b>a</b>	0. 1	_	~				No. o	f programn	nes conduc	cted	
Sl. No.	Title	e of Techn	ology	Sou	rce of tech	nology	Cr	op/enterpr	ise	OFT	FLD	Training	g (	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
3		ed Crop Management rcropping Redgram in			UAS (B)	)		Maize				03			
			· · · · · · · · · · · · · · · · · · ·			N	lo. of farn	iers covere	d				·		
	OFT				F	Ĺ <b>D</b>			Tra	aining		Others (Specify)			
Gen	eral	SC	/ST	Gen	eral	SC	/ST	Ger	eral	S	C/ST	Gen	eral	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
				12		03		35	06	10	03				

#### 20. Ragi

	Litte	of Techno	alaav	Sam	ce of tech	nology	Cr	op/enterpr	ico		110. 0	programmes conducted				
Sl. No.	11110	of Iccinic	ology	Soul	cc or teem	nology		op/ciitei pi	150	OFT	FLD	Training	5	Others (Sp	ecify)	
1		2			3			4		5	6	7		8		
		l Crop Mar Ragi (GPU-			UAS (B) Ragi No. of farmers covered				03							
						N	o. of farm	ers covere	d							
	OF	T			FI	LD .			Tr	aining			Others (Specify)			
Gene	General SC/ST		/ST	Gen	eral	SC/	ST	Gen	eral	S	SC/ST	General SC/ST			/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	
				07	03	05		29	08	11						

# 5. Redgram

Sl. No.	Title of Technology	Source of technology	Cuanlantaunuisa		No.	of programmes c	onducted				
SI. 1NU.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)				
1	2	3	4	5	6	7	8				
5	Integrated Pest and Disease Management in Redgram	UAS (B)	Redgram			01					
No. of farmers covered											
	OFT	FLD	7	<b>Fraining</b>		Ot	thers (Specify)				

	Ol	FT			FI	L <b>D</b>			Trai	ning			Others (	Specify)	
Ger	General		SC/ST		eral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	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			03	01	03	04					

#### 6. Redgram (2011-12)

Sl. No.	Title of Technology	Source of technology	Cronlontorprico		No.	of programmes o	onducted				
51. 110.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)				
1	2	3	4	5	6	7	8				
6	Management of pulse storage beetle through neem leaves and ginger powder	TNAU	Redgram			01					
	No. of farmers covered										

						-	101 01 1011		-						
	Ol	FT			FI	Ĺ <b>D</b>			Trai	ning			Others (	Specify)	
Gei	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	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
03		02						03		02					

#### 7. Groundnut

Sl. No.	Title of Technology	Source of technology	Cronlentormico		No.	of programmes c	onducted					
51. 110.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)					
1	2	3	4	5	6	7	8					
7	Performance assessment of Groundnut varieties for better yield	UAS (D) UAS (B) ICRISAT	Groundnut			03						
	No. of farmers covered											

No. of farmers cover	rea
----------------------	-----

	Ol	FT		FLD General SC/ST					Trai	ning			Others (	Specify)	
Ger	General		SC/ST		eral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	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
02	01							12	06						

### 8. Cotton

Sl. No.	Title of Technology	Source of technology	Cron/ontornrico		No. o	of programmes c	onducted
SI. 140.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
8	Integrated management of sucking pests in Cotton	UAS (B)	Cotton			02	
		No	of formore governed		'		

		Ol	FT			FI	L <b>D</b>			Trai	ning			Others (	(Specify)	
	Gen	neral	SC	/ST	Ger	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	SC	/ST
Ī	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
					07		03		11		17					

#### 9. Sugarcane (2012-13)

Sl. No.	Title of Technology	Source of technology	Cron/ontornriso		No.	of programmes o	conducted					
51. 140.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)					
1	2	3	4	5	6	7	8					
9	Integrated management of early shoot borer in Sugarcane	UAS (B)	Sugarcane			01						
	No. of farmers covered											

	Ol	FT			Fl	LD			Trai	ining			Others (	(Specify)	
Ge	General		SC/ST		General SC/ST		Ger	eral	SC	/ST	Ger	neral	SC	/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
				10		01		11							

#### 10. Arecanut

Sl. No.	Title of Technology	Source of technology	Cron/anterprise	rprise			conducted
51. 110.	Title of Technology	Technology Source of technology Crop/enterprise OFT  2 3 4 5	FLD	Training	Others (Specify)		
1	2	3	4	5	6	7	8
10	Integrated management of bacterial leaf stripe in young Arecanut plantation	UAS (B)	Arecanut			01	

	Ol	FT			FI	Ĺ <b>D</b>			Trai	ning			Others (	Specify)	
Ger	neral	SC/ST		Gen	eral SC/ST		Gen	eral	SC	/ST	Gen	eral	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
				03		02		03		02					

#### 11. Arecanut

Sl. No.	Title of Technology	Source of technology	Cron/ontornrico		No.	of programmes c	onducted
51. 140.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
11	Promotion of green manure crop in Arecanut plantations	IIHR (B)	Arecanut			01	

#### No. of farmers covered

	Ol	FT		FLD					Trai	ning			Others (	Specify)	
Ger	neral	SC	/ST	Gen	eral	SC	/ST	Gen	neral	SC	/ST	Gen	eral	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
				12				10		05					

### 12. Tomato

Sl. No.	Title of Technology	Source of technology	Crop/enterprise		No.	of programmes o	conducted
SI. NO.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
12	Integrated Crop Management in Tomato	IIHR (B)	Tomato			03	

	O	FT			FI	L <b>D</b>			Trai	ining			Others (	(Specify)	
Ge	eneral	SC/ST		General SC/ST		Ger	neral	SC	/ST	Gen	eral	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
				02		05	01	16	01	20	03				

# 13. Mango

Sl. No.	Title of Technology	Source of technology	Cron/ontornrico		No.	of programmes o	conducted
51. 140.	Title of Technology	Source of technology Crop/enterprise OFT  3 4 5	OFT	FLD	Training	Others (Specify)	
1	2	3	4	5	6	7	8
13	Foliar application of 'Mango Special' in Mango for enhanced yield	IIHR (B)	Mango			01	

#### No. of farmers covered

	Ol	FT			FLD Training						Others (	(Specify)			
Gei	neral	SC	/ST	Ger	eral	SC	/ST	Gen	eral	SC	/ST	Ger	eral	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
				02				02	01	02					

# 14. Mango (2012-13)

Sl. No.	Title of Technology	Source of technology	Crop/enterprise		No.	of programmes o	conducted				
51. 140.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)				
1	2	3	4	5	6	7	8				
14	Integrated Management of stem borer in Mango	IIHR (B)	Mango			01	Workshop – 01				
	No. of farmers covered										

	OI	FT			FI	LD			Trai	ning			Others (	Specify)	
Ge	neral	SC	/ST	Gen	General SC/ST		/ST	Gen	eral	SC	/ST	Ger	eral	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
				03		02		03		02		25	08	10	05

#### 15. Banana

Sl. No.	Title of Technology	Source of technology	Cron/ontornrico		No.	of programmes o	conducted
51. 140.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
15	Integrated Crop Management in Banana	IIHR (B)	Banana			01	

#### No. of farmers covered

	Ol	FT			FI	LD			Trai	ning			Others (	Specify)	
Ger	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	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
				08		02		10							

#### 16. Banana

Sl. No.	Title of Technology	Source of technology	Cnontontonnico		No.	of programmes c	onducted
SI. NO.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
16	Modified high density planting for increased productivity in Banana	UAS (B) NRC on Banana (Thirchi)	Banana			01	
		No	of farmers covered				

	Ol	FT			FI	L <b>D</b>			Trai	ning			Others (	Specify)	
Gen	eral	SC	/ST	General		SC	/ST	Gen	eral	SC	/ST	Gen	eral	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
02								10							

#### 17. Coconut

Sl. No.	Т;41.	e of Techno	ology	Com	rce of tech	nology	Cn	on/ontown	ico		No. of	è programn	nes condu	ucted	
51. 140.	1100	e of Technic	ology	Soul	ice of tech	nology	Ci	op/enterpr	150	OFT	FLD	Training	5	Others (Spe	ecify)
1		2			3			4		5	6	7		8	
17	Populariz Drumstic Coconut	ck as into	KDM-1 ercrop in		UHS (B)	)		Coconut				03		nducted 7 ning for Rura	FOCT al Youths
						N	lo. of farm	ers covere	d						
	0	FT			FI	L <b>D</b>			Trai	ning			Others	s (Specify)	
Gen	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	SC	C/ST	Gen	eral	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
				04	01	01		29		08		135	01	64	

# 18. Dairying

Sl. No.	T;4lo	of Toobne	ology	Com	was of took	nology	C	on/ontownw	•iaa		No. o	of programm	nes condu	cted	
SI. 1NO.	Title	of Techno	ology	Soul	rce of tech	nology	Cr	op/enterpr	ise	OFT	FLD	Training	5	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
18	Improved practices better perf	in dairy aı	nagement nimals for	K	VAFSU, B	Bidar	(Catt	Dairying le and Buff	aloe)			02	Ani	mal health o	camp – 02
	_					1	No. of farm	ers covere	d				"		
	OF	T			FI	Ĺ <b>D</b>			Tı	raining			Others	(Specify)	
Gen	eral	SC	/ST	Gen	eral	SC	S/ST	Ger	eral	S	C/ST	Ger	eral	SC	S/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
				03	02			40	20	04	04				

# 19. Dairying

Sl. No.	Т:41	e of Techno	ology	Som	oo of took	nology	Cm	on/ontown	ico		No. of	f programn	nes conduc	cted	
SI. 140.	1111	e or recinio	ology	Soul	ce of tech	nology	Cro	op/enterpr	ise	OFT	FLD	Training	g (	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
19	Alleviati	on of rep	productive	K	VAFSU, E	Bidar		Dairying				02			
		s in dairy		NL	ANP, Bang	galore	(Catt	le and Buff	aloe						
	through	balanced nu	trition					rearing)							
						N	lo. of farm	ers covere	d						
	О	FT			FI	L <b>D</b>			Tra	aining			Others (	(Specify)	
Gen	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	S	C/ST	Ger	eral	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
09	03							76	52	06	06				

### **20. Fisheries (2013-14)**

Sl. No.	Т;41.	e of Techn	ology	Som	rce of tech	nology	C	op/enterpr	ico		No. o	of programn	nes condu	cted	
51, 110,	1100	e of Techni	ology	Soul	rce or tech	nology	Cr	op/enterpr	ise	OFT	FLD	Training	<u> </u>	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
20	Polycultu earthen p		es in big	K	VAFSU, B	Bidar		Fisheries				02	_	nposium-1 ional Fish / - 1	Farmers
						N	lo. of farm	ers covere	d				·		
	Ol	FT			FI	L <b>D</b>			Tr	aining			Others	(Specify)	
Gen	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	S	C/ST	Gen	eral	SC	S/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		37	15	06	01	82	07	41	05
						1	1		]			<u> </u>	J		1

#### **21. Fisheries (2012-13)**

Sl. No.	Т;41	e of Techno	ology	Som	rce of tech	nology	Cre	op/enterpri	iso		No. o	f programn	nes condu	cted	
51. 140.	1111	e of Techno	ology	Soul	ice of tech	nology	Cit	op/enterpri	ise	OFT	FLD	Training	g	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
21	Integrate	d Fish Farn	ning		UAS (B)	)		Fisheries				02			
	-1			·L		N	o. of farm	ers covered	i		L		·		
	0	FT			FI	Ĺ <b>D</b>			Tr	aining			Others	(Specify)	
Gen	neral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	S	C/ST	Gen	neral	SC	/ST
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
				15		01	01	38		23					

# **22. Fisheries (2012-13)**

Sl. No.	Title	of Techno	ology	Som	rce of tech	nology	Cm	op/enterpr	igo		No. o	f programn	nes condu	cted	
S1. NO.	11116	of Techno	ology	Soul	rce of tech	nology	Cr	op/enterpr	ise	OFT	FLD	Training	3	Others (Sp	ecify)
1		2			3			4		5	6	7		8	
22	Production fisheries income		rnamental additional		UAS (B)	)		Fisheries				02			
						N	o. of farm	ers covere	d	"			'		
	OI	FT			FI	LD .			Tra	aining			Others	(Specify)	
Gen	eral	SC	/ST	Gen	eral	SC	/ST	Gen	eral	S	C/ST	Gen	eral	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
				01				09	25	01	23				

# PART IV - On Farm Trial

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation		01								01
Integrated Pest Management										
Integrated Crop Management						01				01
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			01							01
Mushroom cultivation										
Total		01	01			01				03

# 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	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management	01					01
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating						
enterprises						
TOTAL	01					01

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

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

# 4.B. Achievements on technologies Assessed and Refined 4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management					
Varietal Evaluation	Groundnut	Performance assessment of Groundnut varieties for better yield	03	03	1.2
Integrated Pest Management					
Integrated Crop Management	Banana	Modified high density planting in Banana	02	02	0.2
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	Redgram	Management of pulse storage beetle though neem leaves and ginger power	05	05	
Mushroom cultivation					
Total			10	10	1.4

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

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

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management	Cattle	Alleviation of reproductive problem (uterine prolapse) in dairy animals through balanced nutrition	10	10
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
		Total	10	10

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

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

# **4.C1. Results of Technologies Assessed Results of On Farm Trial**

#### 1. Groundnut

	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Groundnut Ra	ainfed	<ul> <li>Use of local variety TMV-2</li> <li>Low yield</li> <li>Low fodder quality</li> </ul>	Performance assessment of groundnut varieties for better yield	03	Technology option 1 (Farmer's practice): TMV-2  Technology option 2: GPBD-4  Technology option 3: KCG-2  Technology option 4: ICGV-91114	1. Plant height (cm) 2. No. of nodules/ plant 3. Root length (cm) 4. Test weight (g) 5. Yield (q/ha) 6. Haulm yield (t/ha)	1. 46 2. 86 3. 11.2 4. 11 5. 15.1 6. 5.6  1. 61 2. 88 3. 14 4. 15 5. 18.9 6. 9.5  1. 51 2. 88 3. 11.8 4. 14 5. 16.3 6. 6.8  1. 55 2. 86 3. 13.8 4. 14 5. 17.23 6. 7.0	GPBD-4 is better to compared to all other varieties. Fodder yield is good and remains green even after harvest ICGV-91114 is drought tolerant but pods are un even in size KCG-2 seeds are bold	GPBD-4 pod yield and haulm yield is better compare to all varieties. Fetched good market price		

#### Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Rs. / unit)	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice): TMV-2		15.10		20963/-	1.62
<b>Technology option 2 :</b> GPBD-4	UAS (D)	18.90	q/ha	34150/-	2.06
Technology option 3: KCG-2	UAS (B)	16.30		21680/-	1.67
Technology option 4: ICGV91114	ICRISAT	17.23		24870/-	1.77

### 2. Banana

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Banana	Irrigated	Lower plant density	Modified high density planting in Banana	02	Technology option 1 (Farmer's practice): Square method 2.7 x 2.7 m spacing  Technology option: Square method 1.8 x 1.8 m spacing  Technology option 3: Paired row with zig zag method 1.2 x 1.2 x 2 m spacing	<ul> <li>Soil test before and after</li> <li>Yield (q/ha)</li> <li>Bunch weight (kg)</li> <li>No. of Hands in the bunch</li> <li>No. of fingers in the hand</li> </ul>					

### Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Rs. / unit)	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) :					
Technology option 2	UAS (B)	Crop is 6 months			
Technology option 3	NRC on Banana	old			
	(Trichi)				

# 3. Redgram (2011-12)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Redgram		Incidence of pulse storage beetle	Management of pulse storage beetle through neem leaves and ginger powder	05	Technology option 1 (Farmer's practice): Storage in gunny bags Technology option 2: Storage in bins using sand layers Technology option 3: Storage in mixture of ginger powder (30 g) and neem leaves (50 g)/kg of pulse	• Incidence of pulse storage beetle (%)	00	Redgram stored in bins using sand layers reduces pulse beetle incidence to 100%	Redgram stored in bins using sand layers reduces pulse beetle incidence to 100% but stored by using neem leaves and ginger powder reduces 90%		

# Contd..

Technology Assessed	Source of	Production	Unit	Net Return	BC Ratio
	Technology	(Saved seeds)		(Rs. / unit)	
13	14	15	16	17	18
Technology option 1 (Farmer's practice):		25		750/-	1.49
Technology option 2	UAS (B)	50	Kg/Storage bin	1500/-	1.75
Technology option 3	TNAU	40		1200/-	1.66

**Note:** Storage of seeds (50 kg)

# 4. Dairy Animals

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Dairying	Semi intensive	Pre and post partum uterine prolapse in pregnant dairy animals	Alleviation of reproductive problem (uterine prolapse) in dairy animals through balanced nutrition	12	Technology option 1 (Farmer's practice): Feeding cakes/brans along with dry roughages Technology option 2: Compounded cattle feed with roughages Technology option 3: Compounded cattle feed + ASMM + Dewormer + Calcium tonic	<ul> <li>Pre &amp; post partum uterine prolapse</li> <li>Parturition</li> <li>ROP</li> </ul>	<ul> <li>Pre &amp; post partum prolapse observed</li> <li>Dystokia</li> <li>ROP</li> <li>Pre partum</li> <li>Assisted parturition</li> <li>ROP</li> <li>No prolapse</li> <li>Normal parturition</li> <li>No ROP</li> </ul>	No uterine prolapse observed during the gestation period. Also parturition was normal. No ROP	Farmers are convinced by feeding compounded feeds and ASMM and mineral - vitamin tonic. Also learnt about the importance of compounded feed during the dry period		

### Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Rs. / unit)	BC Ratio
13	14	15	16	17	18
<b>Technology option 1 (Farmer's practice):</b>		Milk - 165		2325/-	2.30
Technology option 2	KVAFSU, Bidar	Milk - 240	(Liters/month)	3900/-	2.86
Technology option 3	NIANP (B)	Milk - 300		5100/-	3.13

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

#### 1. Groundnut

- 1 Title of Technology Assessed: Performance assessment of groundnut varieties for better yield
- 2 Problem Definition: Low pod and fodder yield, Incidence of tikka leaf spot, root rot
- 3 Details of technologies selected for assessment:

Technology options	Details of technology
Technology Option – 1	TMV-2
Technology Option – 2	GPBD-4
Technology Option – 3	KCG-2
Technology Option – 4	ICGV-91114

4 Source of technology:

Technology options	Source of technology
Technology Option – 1	
Technology Option – 2	UAS (D)
Technology Option – 3	UAS (B)
Technology Option – 4	ICRISAT

- 5 Production system and thematic area: Varietal evaluation for better yield to zone IV
- 6 Performance of the Technology with performance indicators:

<b>Technology options</b>	Parameter						
	Plant height (cm)	No. of nodules/ plant	Root length (cm)	Test weight (g)	Yield (q/ha)	Haulm yield (t/ha)	
Technology Option – 1	46	86	11.2	11	15.1	5.6	
Technology Option – 2	61	88	14.0	15	18.9	9.5	
Technology Option – 3	51	88	11.8	14	16.3	6.8	
Technology Option – 4	55	86	13.8	14	17.23	7.0	

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :

GPBD-4 pod yield and haulm yield is better compare to all varieties. Fetched good market price

- 8. Final recommendation for micro level situation: --
- 9. Constraints identified and feedback for research: Farmers expressed that non availability of quality seed material
- 10.Process of farmers participation and their reaction: GPBD-4 pod yield and haulm yield is better compare to all varieties. Fetched good market price

#### 2. Banana

- 1 Title of Technology Assessed: Modified high density planting in Banana.
- 2 **Problem Definition:** Lower plant density resulting in lower productivity of the crop.
- 3 Details of technologies selected for assessment:

Technology options	Details of technology
Technology Option – 1	Square method 2.7 x 2.7 m spacing
Technology Option – 2	Square method 1.8 x 1.8 m spacing
Technology Option – 3	Paired row with zig zag method 1.2 x 1.2 x 2 m spacing

#### 4 Source of technology:

Technology options	Source of technology
Technology Option – 1	
Technology Option – 2	UAS (B)
Technology Option – 3	NRC on Banana (Trichi)

- 5 Production system and thematic area: Irrigated and Integrated Crop management
- 6 Performance of the Technology with performance indicators: Crop is 6 months old
- 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: --

#### 3. Redgram

- 1 Title of Technology Assessed: Assessment of methods for management of pulse storage beetle through neem leaves and ginger powder
- 2 Problem Definition: Pulse beetle is main problem in storage of pulses which causes reduction in quality and quantity of seeds
- 3 Details of technologies selected for assessment:

Technology options	Details of technology
Technology Option – 1	Storage in gunny bags
Technology Option – 2	Storage in bins using sand layers
Technology Option – 3	Storage in mixture of ginger powder (30 g) and neem leaves (50 g)/kg of pulse

#### 4 Source of technology:

Technology options	Source of technology
Technology Option – 1	
Technology Option – 2	UAS (B)
Technology Option – 3	TNAU

- 5 Production system and thematic area: Post harvest technology
- 6 Performance of the Technology with performance indicators:

Technology options	Parameter
Technology Option – 1	% incidence of pulse storage beetle – <b>50</b>
Technology Option – 2	% incidence of pulse storage beetle – <b>00</b>
Technology Option – 3	% incidence of pulse storage beetle – <b>10</b>

#### 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :

Redgram stored in bins using sand layers reduces pulse beetle incidence to 100% but stored by using neem leaves and ginger powder reduces 90%. But after 5-6 months activity of neem leaves and ginger powder decreases.

- **8. Final recommendation for micro level situation:** Redgram stored in bins using sand layers reduces pulse beetle incidence to 100%.
- 9. Constraints identified and feedback for research: --
- **10.Process of farmers participation and their reaction:** Redgram stored in bins using sand layers reduces pulse beetle incidence to 100% but stored by using neem leaves and ginger powder reduces 90%.

#### 4. Dairying

- 1 Title of Technology Assessed: Alleviation of reproductive problems (uterine prolapse) in dairy animals through balanced nutrition.
- 2 **Problem Definition:** Farmers are not feeding their dairy animals based on the nutrients requirement. They are feeding their animal with the available feeding stuffs during lactation period only. During dry period they are not feeding compounded feeds. This is resulting in the deficiencies of both major and micro nutrients leading to reproductive problems especially uterine prolapse, uterine infections in pregnant animals.
- 3 Details of technologies selected for assessment:

Technology options	Details of technology
Technology Option – 1	Feeding cakes/brans along with dry roughages
Technology Option – 2	Compounded cattle feed with roughages
Technology Option – 3	Compounded cattle feed + ASMM + Dewormer + Calcium tonic

#### 4 Source of technology:

Technology options	Source of technology
Technology Option – 1	
Technology Option – 2	KVAFSU, Bidar
Technology Option – 3	NIANP, Bangalore

- 5 Production system and thematic area: Semi intensive, mixed dairy farming. Nutrition management
- 6 Performance of the Technology with performance indicators:

Technology options	Parameter
Technology Option – 1	* Pre & post partum prolapsed observed
Technology Option – 2	* Pre partum
Technology Option – 3	* No prolapse

- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:

  Farmers are convinced about the use of compounded animal feeds and ASMM. Availability of these items at reasonable prices in the near by area is to be ensured.
- **8. Final recommendation for micro level situation:** Farmer should use the required compounded animal feeds and mineral supplements on a regular basis to avoid all types of problems in dairying.
- 9. Constraints identified and feedback for research: Total mixed ration in the farm of feed blocks should be made available to the farmers.
- **10.Process of farmers participation and their reaction:** They are convinced about the importance of balanced feeding in dairy animals both in dry and lactation period.

#### 4.D1. Results of Technologies Refined

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

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

#### Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology Option 1 (best performing Technology Option in assessment)  Technology Option 2 (Modification over Technology Option 1)					
Technology Option 3 (Another Modification over Technology Option 1)					

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

- 1. Title of Technology refined
- 2 Problem Definition
- 3 Details of technologies selected for refinement
- 4 Source of technology
- 5 Production system and thematic area
- 6 Performance of the Technology with performance indicators
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation
- 9 Constraints identified and feedback for research
- Process of farmers participation and their reaction

# PART V - FRONTLINE DEMONSTRATIONS

# 5.A. Summary of FLDs implemented during 2013-14

Sl. No	Category	Farming Situatio	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (		de	. of farme monstratio	n	Reasons for shortfall in
•		n	Year						Proposed	Actual	SC/ST	Others	Total	achievement
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Oilseeds													
2	Pulses	Rainfed	Kharif 2013-14	Redgra m	BRG-2		IPDM	<ul> <li>Use of BRG-2 seeds</li> <li>Seed treatment with <i>Trichoderma</i> and soil application.</li> <li>Installation of pheromone trap.</li> <li>Spray with Profenophos.</li> <li>Neem oil and Indoxicarb</li> </ul>	02	02	03	05	08	
2	Cereals	Irrigated	Kharif 2013-14	Rice	Bpt sona		ICM	<ul> <li>Seed rate 10 kg/acre</li> <li>Raising of the nursery in trays (60-70)</li> <li>Seed treatment with Azospirillum (1kg/acre)</li> <li>Use of transplanting machine</li> <li>Use of power operated Conoweeder</li> <li>Application of ZnSO4 (8 kg)</li> <li>Installation of Pheromone trap</li> </ul>	04	04		20	20	

1	2	3	4	5	6	7	Q	0	10	11	12	12		15
2	2 Cereals	3 Irrigated	4 Kharif 2013-14	S Rice	6 Bpt sona	7	8 IDM	Deep ploughing in summer and burning of stubbles     Removing of weeds from bunds and fields     Maintain proper spacing and avoid excess plant population     Avoid excess N application     Seed treatment with carbendazim     @4g/kg     Soil application of Providements	10 02	02	02	03	05	15
								Pseudomonas fluorescenes @ 5kg/ha after 30 DAT • Spray with Hexaconozole @2ml/L & Validamycin @						
		Rainfed	Kharif 2013-14	Maize + Redgra m		NAH- 1137 BRG- 2	ICM	Soil testing before and after crop     Popularising the Maize(resistant to stem borer) and Redgram (Dual purpose) intercropping.     Recommended seed rate 6kg maize and 3kg Redgram and seed treatment     Application of ZnSO4 @ 5 kg/acre	06	06	03	12	15	

		_	4	_		_			4.0			12		alu KVK, Davanaç
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3	Millets	Rainfed	Kharif	Ragi	GPU-48		ICM	• Seed- GPU-48	06	06	05	10	15	
			2013-14					• Seed treatment with						
								bio fertilizers						
								(Azospirillum @						
								2kg)						
								• Application of						
								ZnSO4 @ 5 kg/acre						
4	Vegetables	Irrigated	Rabi/	Tomato		Arkha	ICM	New hybrid	03	03	06	02	08	
			Summer			Raksh		• Spraying of						
			2013-14			ak		Vegetable Special						
								@ 5g/lit. of water						
5	Flowers													
6	Ornamental													
7	Fruit	Irrigated	Rabi/	Mango	Alphanso		INM	• Spray of Mango	01	01		02	02	
			Summer					Special (5g/l of						
			2013-14					water)						
		Irrigated	Rabi/	Mango	Alphanso		IPM	• Application of	100	100	02	03	05	
			Summer					DDVP in holes	Plants	Plants				
			2012-13					• Rejuvenation of						
								cambium by using						
								healer cum sealer						
		Irrigated	Kharif	Banana	G9, Yelakki		ICM	• Spray of Banana	04	04	02	08	10	
			2013-14					Special						
8	Spices and							_						
	condiments													
9	Commercial	Rainfed	Kharif	Cotton		Private	IPM	• Spray with	04	04	03	07	10	
			2013-14					Acetamaprid 20 SP						
								@ 0.2 g/l and Neem						
								oil against sucking						
								pests						
								• Foliar spray of						
								MgSO4 and KNO3						
								Profenenphos spray						
								against the mirid						
								bug						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
9	Commercial	Irrigated	Kharif 2012-13	Sugarca ne	CO86032		IPM	<ul> <li>Soil application of carbofuron 3G @ 10 kg/ha</li> <li>Earthing up operation after 6<sup>th</sup> and 10<sup>th</sup> week after planting</li> <li>Spray with chloropyriphos @ 2ml/l</li> <li>Removal and burning of affected shoots</li> </ul>	10	10	05	06	11	
10	Medicinal and	aromatic												
11	Fodder													
12	Plantation	Irrigated	Summer 2013-14	Arecan ut	Thirthahalli Local		IDM	<ul> <li>Proper drainage.</li> <li>Removal and burning of affected leaves.</li> <li>Spray with Copper oxychloride and Streptocyclin</li> </ul>	02	02	02	03	05	
		Irrigated	Summer 2013-14	Arecan ut	Channagiri Local		ICM	• Green manure crop in Arecanut plantation	04	04		12	12	
		Irrigated	Kharif 2013-14	Coconu t	KDM-1		ICM	Popularization of KDM-1 Drumstick as intercrop in Coconut gardens	03	03	01	05	06	
13	Fibre													
14	Dairy		Rabi/ Summer 2013-14	Cows	HFX			Improved     management     practices in dairy     animals for better     performance though     balanced feeding	05	05	05			
15	Poultry													
16	Rabbitry													
17	Pigerry													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18	Sheep and													
	goat													
19	Duckery													
20	Common carps	Irrigated	Kharif 2013-14	Fish	Catla Catla Labeo rohita Cyprinus carpio, Pangassius		Polycultu re	Polyculture of fishes in big earthen ponds.						
		Irrigated	Kharif 2012-13	Fish	Catla Catla Labeo rohita Cyprinus carpio		Integrate d Fish Farming	• Integrated Fish Farming with Horticulture and Dairy	2.4	2.4	02	15	17	
21	Mussels													
22	Ornamental fishes	Irrigated	Kharif 2012-13	Fish	Red sword tail, Green sword tail		Ornamen tal fish	• Production of ornamental fish in cement tanks	2 units	2 units		01	01	
23	Oyster mushroom													
24	Button mushroom													
25	Vermicompost													
26	Sericulture													
27	Apiculture													
28	Implements													

# 5. A. 1. Soil fertility status of FLDs plots during 2013-14

Sl.		Farming	Season		Variotes/		Thematic	Toolongloon	Canan	Sta	tus of	soil	Previous
No.	Category	Situation	and Year	Crop	Variety/ breed	Hybrid	area	Technology Demonstrated	Season and year	N	P	K	crop grown
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Oilseeds												
2	Pulses	Rainfed	Kharif 2013-14	Redgram	BRG-2		IPDM	IPDM in Redgram	Kharif 2013-14	L	Н	Н	Maize
3	Cereals	Irrigated	Kharif 2013-14	Rice	Bpt sona		ICM	Integrated crop management in Rice with an emphasis on Mechanization	Kharif 2013-14	M	Н	М	Rice
		Irrigated	Kharif 2013-14	Rice	Bpt sona		IDM	Integrated management of sheath blight in Rice	Kharif 2013-14	M	Н	M	Rice
		Rainfed	Kharif 2013-14	Maize + Redgram	BRG-2	NAH-1137	ICM	Integrated Crop Management and intercrop Redgram in Maize	Kharif 2013-14	M	Н	Н	Cotton
4	Millets	Rainfed	Kharif 2013-14	Ragi	GPU-48		ICM	Integrated Crop Management in HYV of Ragi	Kharif 2013-14	L	Н	Н	Maize
5	Vegetables	Irrigated	Rabi/ Summer 2013-14	Tomato		Arkha Rakshak	ICM	New hybrid and spraying of vegetable special	Rabi/ Summer 2013-14	M	Н	M	Maize
6	Flowers												
7	Ornamental												
8	Fruit	Irrigated	Rabi/ Summer 2013-14	Mango	Alphanso		INM	Foliar application of Mango Special	Rabi/ Summer 2013-14	L	M	M	Mango

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	Fruit	Irrigated	Rabi/ Summer 2012-13	Mango	Alphanso		IPM	Integrated Management of stem borer in Mango	Rabi/ Summer 2012-13	M	M	M	Mango
		Irrigated	Kharif 2013-14	Banana	G9, Yelakki	1	ICM	Foliar application of Banana Special	Kharif 2013-14	M	Н	M	Maize
9	Spices and condiments												
10	Commercial	Rainfed	2013-14			Menaka	IPM	Integrated Management of Sucking Pest In Cotton	Kharif 2013-14	L	M	Н	Maize
		Irrigated	ed Kharif Sugarcane CO86032			IPM	Integrated Management of early shoot borer in Sugarcane	Kharif 2012-13	M	M	M	Sugarcane	
11	Medicinal and	l aromatic											
12	Fodder												
13	Plantation			Arecanut	Thirthahalli Local		IDM	Integrated Management of bacterial leaf stripe in Arecanut	Rabi/ Summer 2013-14	L	M	M	Arecanut
		Irrigated	Kharif 2013-14	Arecanut	Channagiri Local		ICM	Use of green manure crops to increase fertility status of soil	Kharif 2013-14	L	Н	Н	Arecanut
		Irrigated	Kharif 2013-14	Coconut	KDM-1		ICM	Popularization of KDM-1 Drumstick as intercrop in coconut gardens	Kharif 2013-14	L	L	Н	Coconut
14	Fibre												

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

# **5.B.1.** Crops

C	Name of the	¥7	TT1	Farming situation	No. of	Area			Yield (q/ha)		%	*Eco	nomics of (Rs./		tion	*	Economic (Rs./		
Crop	technology demonstrated	Variety	Hybrid		Demo.	(ha)	Н	Dem L	0 A	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Oilseeds	_					-													
Pulses																			
Redgram	IPDM in Redgram	BRG-2		Rainfed	05	02	9.6	5.2	8.8	6.3	39.60	11500	28160	16660	2.44	12250	20160	7910	1.64
Cereals																			
Rice	ICM in Rice with an emphasis on mechanization	Bpt sona		Irrigated	20	08	57.0	53.50	55.17	49.55	11.34	44300	82755	38455	1.86	49650	74325	24675	1.49
	Integrated Management of sheath blight in Rice	Bpt sona		Irrigated	05	02	57.3	41.6	52.9	43.3	22.17	45550	84640	39090	1.85	48800	69280	20480	1.41
Maize	ICM and intercropping in Redgram in Maize	BRG-2	NAH- 1137	Rainfed	15	06	58.05	52.5	53.15	41.5	28.02	34000	63756	29756	1.87	31000	49800	18800	1.60
Millets																			
Ragi		GPU-48		Rainfed	15	06	23.5	18.9	22.50	16.3	38	23000	54000	31000	2.34	24500	40100	15600	1.63
	ICM in HYV Ragi								Fodder Yield – 3 tons	Fodder Yield – 2.5 tons									
Vegetables																			
Tomato	ICM in tomato		Arkha Rakshak	Irrigated	08	03	775.0	552.5	672.2	578.4	16.21	49750	168047	118297	3.38	50250	144609	94359	2.88
Flowers																			
Ornamenta	l																		
Fruit																			
Mango	Foliar application of 'Mango Special in Mango for enhanced yield	Alphanso		Irrigated	02	01													
Mango 2012-13	Integrated Management of Stem borer in Mango	Alphanso		Irrigated	05	100 Plants			17										
Banana	ICM in Banana	Yelakki		Irrigated	12	04	216.8	201.6	204.4	154.14	32.6	165000	654080	489080	3.96	192500	493248	300748	2.56
Spices and	condiments	·																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Commercial																			
Sugarcane 2012-13	Integrated Management of early shoot borer	CO86032		Irrigated	11	10	1513	1027	1455	1125	29.33	145625	334650	189025	2.29	150375	258750	108375	1.72
Fibre crops l	ike cotton																		
Cotton	Integrated management of sucking pests in Cotton		Menaka	Rainfed	10	04	15.45	8.70	14.25	10.75	32.55	32250	68400	36150	2.12	34500	51600	17100	1.49
Medicinal an	d aromatic																		
Fodder																			
Plantation																			
Arecanut	Integrated management of bacterial leaf stripe in young Arecanut plantation	Thirthahalli Local	-	Irrigated	05	02												-	
	Promotion of green manure crop in Arecanut plantations	Channagiri Local		Irrigated	10	04													
Coconut	Popularization of KDM-1 Drumstick as intercrop in Coconut gardens	KDM-1		Irrigated	08	03													
Fibre																			
Others																			

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

Crop	Data on other parameters in relation to technology demonstrated										
	Parameter with unit	Demo	Check								
Rice (Mechanization)	Germination (%)	95.0	83.0								
	Plant height (cm)	71.6	65.9								
	No. of tillers/hill	41.9	29.0								
	Pest incidence (%)	4.5	12.0								
	Cost of production (Rs.)	18000/-	23000/-								
Rice	Incidence of sheath blight (%)	06	30								
Maize	Plant height (cm)	175.18	172.40								
	Stem borer incidence (%)	5.00	30.0								
	No. of rows/cob	12.94	11.78								
Ragi	Germination (%)	85.0	62.0								
	Plant height (cm)	72.50	71.00								
	No. of fingers/head	6.1	4.2								
	Crop duration (days)	98	130								
Redgram	No. of pods/Plant	52.3	38.7								
	Pod borer incidence (%)	05	22								
	Incidence of wilt (%)	04	20								
Cotton	Incidence of sucking pest (%)	08	28								
Sugarcane	Incidence of early shoot borer (%)	05	26								
Tomato	Percent fruit cracking (%)	05	15								
	Bacterial wilt (%)	06	18								
	Incidence of TLCV (%)		22								
	Early blight (%)		05								
Mango (2012-13)	Initial infection of stem borer – 12	Rejuvenation % Treated - 15	Rejuvenation % Un treated - 09								
Banana	Average bunch weight (kg)	14.86	11.21								
	No. of hands in bunch	09	06								
	No. of fingers in hand	210	185								

### **5.B.2.** Livestock and related enterprises

Type of	Name of the	Ducad	No. of	No.	Yie	eld (Li	ters/90d	lays)	%	*Econ	Economics of demonstration Rs./unit)		ation	*Economics of check (Rs./unit)			
livestock	technology demonstrated	Breed	Demo	of Units		Demo		Check	Increase	Gross	Gross	Net	**	Gross	Gross	Net	**
	uemonstrateu			Units	H	L	A	if any		Cost	Return	Return	BCR	Cost	Return	Return	BCR
Dairy																	
	Balanced nutrition and improved management practices in dairy animals for better performance	HFx cow	05	05	1620	630	1170	900	16.6	7200	31590	26370	4.4	7200	24300	17100	3.4
Poultry																	
Rabbitry																	
Pigerry																	
Sheep																	
and goat																	
Duckery																	
Others																	

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

_	Data on other parameters in relation to technology demonstrated											
Parameter with unit Demo Check if any												
pH of the milk												
Corrected lactometer reading 1.029 – 1.030 1.023 – 1.025												

#### **5.B.3.** Fisheries

	Name of the			Units/		Vield	d (q/ha)				omics of c		tion			Economics of check		
Type of	technology	Breed	No. of	Area					<b>%</b>		s./unit) or	`			Rs./unit) o	_ `		
Breed	demonstrated	Dreeu	Demo	$(\mathbf{m}^2)$		Demo		Check	Increase	Gross	Gross	Net	**	Gross	Gross	Net	**	
					H	L	A	if any		Cost	Return	Return	BCR	Cost	Return	Return	BCR	
Common	Polyculture of	Pangassius,	06	64000														
carps	fishes in big earthern ponds (2013- 14)	Catla catla Labeo rohita				Crop is to be harvested												
	Integrated Fish Farming (2012-13)	Pangassius, Catla catla Labeo rohita, Cyprinus carpio	17	17 units	100	60	80	20	300	150000	800000	650000	5.33	50000	150000	100000	3.0	
Mussels																		
Ornamental fishes	Production of ornamental fishes in backyard for additional income (2012-13)	Red sword tail, Green sword tail	01	01	No./batch	80 No./ batch	No./batch		ł	10000	15000	5000	1.5			-		
Others																		

 $\textbf{Note:} \ Ornamental \ fishes - 5 \ batches/year/tank$ 

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

Data on other parameters in relation to technology demonstrated									
Parameter with unit	Demo	Check if any							
Fish (2012-13) - IFF									
Average fish body weight (kg)	1.25	0.8							

### **5.B.4.** Other enterprises

Endomico	Name of the	Variety/		Units/		Y	ield (d	1 (n/ha)						es of check or (Rs./m2			
Enterprise	technology demonstrated	species	Demo	Area {m <sup>2</sup> }	H		Check if any	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others																	

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

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

## **5.B.5.** Farm implements and machinery

Name of the	Cost of the implement	Name of the technology demonstrated	No. of	Area covered under	require	oour ment in days	%	Savings in labour (Rs./ha)	*Ecoi	nomics of (Rs./	demonstra /ha)	ation	*	Economic (Rs./		\$
implement	in Rs.		Demo	demo	Demo	Check	save		Gross	Gross	Net	**	Gross	Gross	Net	**
				in ha	Demo	Oncon			cost	Return	Return	BCR	Cost	Return	Return	BCR

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

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

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

### **Rice (Mechanization)**

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	03	49	Selection of the farmers for demonstration, Selection of the machine for transplanting (Rider type and Walk Behind type)
2	Training	04	57	<ul> <li>Seed treatment with bio-fertilizers in paddy</li> <li>Different machines for transplanting in paddy</li> <li>Weed management through conoweeder.</li> <li>Integrated pest management in paddy</li> </ul>
3	Field visit to FLD plots	08	42	Demonstration in three villages and field visit to collect the relevant data at different stages of the crop.
4	Method demonstration	04	67	<ul> <li>Filling of the trays with sand and mud, Sowing of the seeds in trays</li> <li>Mechanized Transplanting through walk behind type</li> <li>Mechanized Transplanting through Rider type</li> <li>Use of conoweeder for weeding</li> </ul>
5	Media Coverage	05	-	Etv Annadata: Mechanization in paddy transplanting (12-08-2013) Etv Annadata: Fertilizer, weed water management (07-09-2013) Udaya vani, Article on paddy mechanization in Janathavani news paper and Annadata Sukhibhav
6	Field day	01	70	Conducted at Goppanal in collaboration with department of Agriculture, Davangere . ADA's,AO,AAO's and Farmer facilitators attended the programme.
7	Folder	01		Mechanization in Rice – 500 copies (Kannada)

#### Rice

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	15	Preliminary visit for farmers selection
2	Farmers training	01	07	Integrated Management of sheath blight in Rice
3	Field visit	04	47	Diagnostic visit
4	Method demonstration	02	22	Spraying solution preparation
5	Training for extension functionaries	01	25	IDM in Rice
6	Field day	01	16	Experience sharing
7	Paper coverage	01		Janathavani
8	TV Coverage			

### Maize

Sl.No.	Activity	No. of activities	Number of	Remarks
2202 100		organized	participants	
1	Group discussion	01	28	Collected the information on cropping pattern of the village, main
				crops
2	Training			Seed treatment, spacing and fertilizer management
		03	53	Importance of micronutrients and water soluble fertilizers
				Pest and disease management
3	Field visit to FLD plots	04	41	Field visit at time of sowing, follow up visit after the month where
				there was no rains, suggested for weeding and spraying of the water
				soluble fertilizers (19/18 all)
4	Method demonstration	02	35	Soil Sampling for soil analysis, Seed treatment with Bio fertilizers,
				Application of ZnSO <sub>4</sub> and spraying of water soluble fertilizers.
5	Media Coverage	05		ETV Annadata: Seed treatment, spacing and fertilizer management
				(25-05-2013)
				Etv Annadata: Weed management (20-06-2013)
				AIR, Bhadravathi: Land preparation for Kharif crops (25-04-2013)
				Vijayakarnataka, Janathavani, Prajavani
6	Field day	01		Conducted at Hanumathapura in collaboration with department of
				Agriculture, Jagalur ADA's, AO, AAO's and Farmer facilitators
				attended the programme.
7	Folder	01		Integrated Crop Management in Maize – 500 copies (Kannada)

# Ragi

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	24	Collected the information on cropping pattern of the village, main crops
2	Training	03	35	Seed treatment with bio-fertilizers
				Spraying of water soluble fertilizers for higher yield
				Weed and fertilizer management in Ragi
3	Field visit to FLD plots	04	38	At the time of sowing, Follow up visits (collection of data), At the time of harvesting
4	Method demonstration	02	45	Soil sampling, Seed treatment with bio-fertilzers
5	Media Coverage	01		Vijayakarnataka
6	Field day	01		Conducted at Billahalli in collaboration with department of Agriculture, Channagiri
				AO, AAO's and Farmer facilitators attended the programme.
7	Folder	01		Integrated Crop Management in Maize – 500 copies (Kannada)

### Redgram

Sl.No.	Activity	No. of activities organized	Number of participants	s Remarks				
1	Group discussion	01	13	Preliminary visit for farmers selection				
2	Farmers training	01	08	IPDM in Redgram				
3	Field visit	05	53	Diagnostic visit				
4	Method demonstration	03	31	Preparation of spray solution, Trichoderma usage				
5	Training for extension functionaries							
6	Field day	01	11	Experience sharing				
7	Paper coverage	01		Kannada Prabha				
8	TV Coverage							

#### Cotton

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	16	Preliminary visit for farmers selection
2	Farmers training	02	28	Integrated management of sucking pest in Cotton
3	Field visit	05	36	Diagnostic visit
4	Method demonstration	02	17	Installation of sticky traps
5	Training for extension functionaries			
6	Field day	01	13	Experience sharing
7	Paper coverage	01		Vijayavani
8	TV Coverage			

#### **Tomato**

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	12	Preliminary visit for farmers selection
2	Farmers training	9 03		Importance of soil testing
		03 4		Integrated Nutrient Management
				Importance of micronutrient
3	Field visit	03	34	Diagnostic visit
4	Method demonstration	01	16	Preparation of Mango Special
5	Training for extension functionaries			
6	Field day	01	10	Experience sharing

#### Banana

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	02	22	Preliminary visit for farmers selection
2	Farmers training	01	15	ICM in Banana
3	Field visit	06	16	Diagnostic visit
4	Method demonstration	01	08	Preparation of Banana Special
5	Training for extension functionaries	02	48	ICM in Banana
6	Field day	01	16	Experience sharing
7	Paper coverage	03		Janathavani
8	TV Coverage	08		Repeated telecast on Banana Special

#### Arecanut

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks				
1	Group discussion	01	12	Preliminary visit for farmers selection				
2	Farmers training	ing 01 05		IDM in Arecanut				
3	Field visit	03	31	Diagnostic visit				
4	Method demonstration	02	24	Preparation of spray solution				
5	Training for extension functionaries	02	42	IPDM in Arecanut				
6	Field day							
7	Paper coverage	01		Vijayavanai				
8	TV Coverage							

# Mango (2012-13)

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks		
1	Group discussion	01	27	Preliminary visit for farmers selection		
2	Farmers training	01	09	Integrated management of stem borer in Mango		
3	Field visit	eld visit 05 44				
4	Method demonstration	02	19	Application of healer cum sealer		
5	Training for extension functionaries	01	11	IPDM in Mango		
6	Field day					
7	Paper coverage	02		Vijayakarnataka		
8	TV Coverage					

**Sugarcane** (2012-13)

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	01	14	Preliminary visit for farmers selection
2	Farmers training	01	11	Integrated management of early shoot borer
3	Field visit	07	58	Diagnostic visit
4	Method demonstration	02	23	Earthing up and bio agent release
5	Training for extension functionaries			
6	Field day	01	13	Experience sharing
7	Paper coverage	01		Vijayakarnataka
8	TV Coverage			

# **Dairying**

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	02	30	To collect opinion on the feeding trial
2	Farmers training	02	60	Balanced nutrition in dairy animals
				Importance of minerals
3	Field visit	03	30	To collect the data on the parameters
4	Farmers interview	01	15	To collect information on the demo

### **Fisheries (2013-14)**

Sl. No.	Activity	No. of activities organized	Number of participants	Remarks
1	Group discussion	02	15	To select the farmers and pond
2	Farmers training	02	59	Pond management
				<ul> <li>Feed and manure management</li> </ul>
3	Field visit	06	20	Feeding regime, sampling for body weight
4	National Fish Farmers Day	01	75	In collaboration with Dept. of Fisheries
5	Fisheries symposium	01	60	In collaboration with KSTA, Bengaluru

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

# Demonstration details on crop hybrids

Type of	Name of the technology	Name of the	No. of			Yiel	d (q/ha	ı)	0/0	*Ecoi	nomics of (Rs.	demonstr /ha)	ation	*]	Economic (Rs./		K
Breed	demonstrated	hybrid	Demo	(ha)		Demo	1	Check	Increase	Gross	Gross	Net	**	Gross	Gross	Net	**
		-			H	L	A			Cost	Return	Return	BCR	Cost	Return	Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Cereals																	
Bajra																	
Maize	ICM and intercropping in Redgram in Maize	NAH- 1137	15	06	58.05	52.5	53.15	41.5	28.02	34000	63756	29756	1.87	31000	49800	18800	1.60
Paddy																	
Sorghum																	
Wheat																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
Total																	
Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
Total																	
Vegetable																	
crops																	
Bottle																	
gourd																	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Capsicum																	
Others																	
Total																	
Cucumber																	
Tomato	ICM in tomato	Arkha Rakshak	08	03	77.50	55.25	67.22	57.84	16.21	49750	168047	84688	3.38	50250	144609	65438	2.88
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Total																	ļ
Commercial																	į
crops																	
Sugarcane																	<u> </u>
Coconut																	
Cotton	Integrated management of sucking pests in Cotton	Menaka	10	04	15.45	8.70	14.25	10.75	32.55	32250	68400	36150	2.12	34500	51600	17100	1.49
Total																	
Fodder crops																	i
Maize (Fodder)																	
Sorghum																	
(Fodder)																	
Total																	

# PART VII. TRAINING

### 7.A. Training of Farmers and Farm Women 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		
1	2	3	4	5	6	7	8	9	10	11		
Crop Production												
Weed Management										·		
Resource Conservation Technologies												
Cropping Systems												
Crop Diversification												
Integrated Farming												
Micro Irrigation/Irrigation												
Seed production												
Nursery management												
Integrated Crop Management	01	28		28	02		02	30		30		
Soil and Water Conservation												
Integrated Nutrient Management												
Production of organic inputs												
Others										1		
a) Natural farming	02	33	07	40	01		01	34	07	41		
b) Bio fuel production and use of biproducts	06	119	46	165	44	31	75	163	77	240		
Horticulture										1		
a) Vegetable Crops												
Production of low value and high volume crop												
Off-season vegetables												
Nursery raising												
Exotic vegetables										-		
Exotic vegetables												

1	2	3	4	5	6	7	8	9	10	11
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others a)Kitchen garden and terrace gardening	04	23	247	270		50	50	23	297	320
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										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others a)										
d) Plantation crops										
Production and Management technology	02	18		18	07		07	25		25
Processing and value addition										
Others										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
	1		1						1	

1	2	3	4	5	6	7	8	9	10	11
Others										
f) Spices										
Production and Management technology										
Processing and value addition										
Others										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others										
<b>Livestock Production and Management</b>										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	01	16	12	28				16	12	28

1	2	3	4	5	6	7	8	9	10	11
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others: a) Preparation of vermicompost	01		36	36		03	03		39	39
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										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others										
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										

1	2	3	4	5	6	7	8	9	10	11
Plant Protection										
Integrated Pest Management										
Integrated Disease Management	01	07		07				07		07
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others a) Apiculture	01	47	10	57	04		04	51	10	61
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										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										

1	2	3	4	5	6	7	8	9	10	11
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										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	19	291	358	649	58	84	142	349	442	791

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

	No. of				No	of Partici	pants			
Area of training	Courses		General			SC/ST	1		<b>Grand Tot</b>	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Chara Dan Arastan	2	3	4	5	6	7	8	9	10	11
Crop Production										
Weed Management	01	15		15				15		15
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil and Water Conservation	01	13	20	33	02		02	15	20	35
Integrated Nutrient Management										
Production of organic inputs										
Others a) seed treatment	03	37	02	39	07		07	44	02	46
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	01	14		14	02		02	16		16
Off-season vegetables										
Nursery raising	01	16		16	01		01	17		17
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

1	2	3	4	5	6	7	8	9	10	11
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	01	10	02	12				10	02	12
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others: a) Integrated nutrient management in banana	01	08		08				08		08
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others										
d) Plantation crops										
Production and Management technology	01	10		10	02		02	12		12
Processing and value addition	01	27		27				27		27
Others										
a) Intercropping in coconut and arecanut	02	35		35	01		01	36		36
b) Green manuring	01	10		10	05		05	15		15
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others										

1	2	3	4	5	6	7	8	9	10	11
f) Spices										
Production and Management technology	01	16	05	21	12	02	14	28	07	35
Processing and value addition										
Others										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management	03	11	01	12	14	02	16	25	03	28
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	01	04		04	10	01	11	14	01	15
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others										
Livestock Production and Management										
Dairy Management	03	43	30	73	08	01	09	51	31	82
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
	ļ		1		J.	1			1	

1	2	3	4	5	6	7	8	9	10	11
Feed and Fodder technology										
Production of quality animal products										
Others										
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										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others										
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										
Plant Protection										

1	2	3	4	5	6	7	8	9	10	11
Integrated Pest Management	03	28		28	09		09	37		37
Integrated Disease Management	02	28		28	02		02	30		30
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others										
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										
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										

1	2	3	4	5	6	7	8	9	10	11
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										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	27	325	60	385	75	6	81	400	66	466

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			Grand Tota	
1	2	Male 3	Female 4	Total 5	Male	Female 7	Total 8	Male 9	Female 10	Total 11
Nursery Management of Horticulture crops	2	3	4	3	6	1	ð	9	10	11
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs	01	08	08	16	05	09	14	13	17	30
Planting material production										
Vermi-culture	01	05	16	21	02	07	09	07	23	30
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										

1	2	3	4	5	6	7	8	9	10	11
Rabbit farming										
Poultry production										
Ornamental fisheries	01	15	12	27	02		02	17	12	29
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Others.										
I. Preparation for UAS and UAHS practical exams	02	21	12	33				21	12	33
II. Production of horticulture crop	03	05	45	50		06	06	05	51	56
III. Vermicompost production	04	24	09	33	03	06	09	27	15	42
IV. Weed management	01	06	03	09	02		02	08	05	13
V. Attracting rural youth towards agriculture	02	16	15	31	11	05	16	27	20	47
VI. Coconut climbing and plant protection	07	106		106	34		34	140		140
VII. Bio-pesticides	01		04	04		04	04		08	08
TOTAL	23	206	124	330	59	37	96	265	163	428

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

	No. of				No	. of Participa	nts			
Area of training	Courses		General	1		SC/ST	1		<b>Grand Total</b>	
N N CY 2 1	0041565	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										<del> </del>
Production of organic inputs										<del> </del>
Planting material production  Vermi-culture										
										<del> </del>
Mushroom Production										<del>                                     </del>
Bee-keeping										<b>↓</b>
Sericulture										<u> </u>
Repair and maintenance of farm machinery and implements										<u> </u>
Value addition										<u> </u>
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										<u> </u>
Rural Crafts										<u> </u>
Production of quality animal products										<u> </u>
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										<u> </u>
Ornamental fisheries										<u> </u>
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
TOTAL										

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			Grand Tota	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	02	50		50	17		17	67		67
Integrated Pest Management	01	13	03	16	03		03	16		16
Integrated Nutrient management	01	10		10	02		02	12		12
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	01	43		43	03		03	46	00	46
Livestock feed and fodder production										
Household food security										
Any other	01	24		24	18		18	42		42
a) production technology of maize and rice										
b) production technology of horticulture crops	01	29	03	32	11		11	40	03	43
c) Biofuel training to gram panchayath officials and elected members	27	418	167	585	273	126	399	525	293	818
d ) ICM in plantation crop	01	25		25	04	01	05	29	01	30
e) Inland aquaculture	01	22	03	25	04		04	26	03	29
Total	36	634	176	810	335	127	462	803	300	1103

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			<b>Grand Total</b>	al
	Courses	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 a) Integrated farming system	01	18	03	21	08		08	26	03	29
Total	01	18	03	21	08		08	26	03	29

# 7.G. Sponsored training programmes conducted

		No. of				No. o	of Partici	pants			
S.No.	Area of training	Courses		General			SC/ST		G	Frand Tot	al
	<u> </u>		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12
1	Crop production and management										
1.a.	Increasing production and productivity of crops	01	16		16	04		04	20		20
1.b.	Commercial production of vegetables	04	23	247	270		50	50	23	297	320
2	Production and value addition										
2.a.	Fruit Plants										ļ
2.b.	Ornamental plants										ļ
2.c.	Spices crops										
3.	Soil health and fertility management										
4	Production of Inputs at site										
5	Methods of protective cultivation										
6	Others:										
	a) Apiculture	01	47	10	57	04		04	51	10	61
	b) Biofuel training to gram panchayath officials and elected members	27	418	167	585	273	126	399	525	293	818
	c) Coconut climbing and plant protection	07	106		106	34		34	140		140
7	Post harvest technology and value addition										
7.a.	Processing and value addition										
7.b.	Others										
8	Farm machinery										
8.a.	Farm machinery, tools and implements										
8.b.	Others										
9.	Livestock and fisheries										
10	Livestock production and management										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management	01	43		43	03		03	46		46
10.c	Fisheries Nutrition										
10.d	Fisheries Management	01	45	02	47	12	01	13	57	03	60
10.e.	Others										
11.	Home Science										
11.a.	Household nutritional security										

1	2 3	4	5	6	7	8	9	10	11	12
11.b.	Economic empowerment of women									
11.c.	Drudgery reduction of women									
11.d.	Others									
12	Agricultural Extension									
12.a.	Capacity Building and Group Dynamics									
12.b.	Others									
	Total 42	698	426	1124	330	177	507	862	603	1465

# Details of sponsoring agencies involved

- 1. KSBDB, Bangalore
- 2. CDB, Bangalore
- 3. NRLM, Zilla Panchayath , Davangere
- 4. Department of Horticulture, Davangere
- 5. KAPL, Bangalore
- 6. WALMI, Dharwada
- 7. KSTA, Bangalore
- 8. MCF Ltd. And Dhanuka Agritech Ltd.

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

		No. of	No. of Participants								
S.No.	Area of training	Courses		General			SC/ST			Grand Tota	ıl
		Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12
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										
2	Post harvest technology and value addition										
2.a.	Value addition										
2.b.	Others										
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										
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.										

1	2	3	4	5	6	7	8	9	10	11	12
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others: Coconut climbing and plant protection	07	106	1	106	34		34	140		140
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others										
	Grand Total	07	106		106	34		34	140		140

# PART VIII – EXTENSION ACTIVITIES

# **Extension Programmes (including extension activities undertaken in FLD programmes)**

Nature of Extension	No. of Programmes	No. of	Participants (C	General)	No	o. of Participa SC / ST	nts	No. of	extension per	rsonnel
Programme		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11
Field Day	09	160	15	175	63	05	68	21		21
Kisan Mela	03									
Kisan Ghosthi	01	This was	conducted I co	ommemora	ion of Kis	san Samman	Divas			
Exhibition	06	1100	360	1460	322	62	384	350	09	359
Film Show	34	518	295	813	119	126	245	196	06	202
Method Demonstrations	04	26	14	40	09	4	13	02		02
Farmers Seminar	03	94	09	103	09		09			
Workshop	02	175	02	177	67	3	70			
Group meetings	03	30		30	06		06			
Lectures delivered as resource	52	680	294	974	219	111	330	130	16	146
persons										
Newspaper coverage	75									
Radio talks	08									
TV talks	18									
Popular articles	12									
Extension Literature	66	180	427	1207	274	139	413	836	299	1135
Advisory Services	1648	1495	36	1531	120		120	47	13	60
Scientific visit to farmers field	108	290	34	324	48	06		17	02	19
Farmers visit to KVK	08	420	80	500	45	15	60	16		16
Diagnostic visits	43	83	10	93	34	02	36	19	03	22
Exposure visits	03	56		56	07		07	01		01
Ex-trainees Sammelan	01	56		56	07		07			
Soil health Camp										
Animal Health Camp	02		,		293	animals treate	ed			
Agri mobile clinic										
Soil test campaigns	01	18		18	03		03			
Farm Science Club Conveners										
meet										

1	2	3	4	5	6	7	8	9	10	11
Self Help Group Conveners										
meetings										
Mahila Mandals Conveners										
meetings										
Celebration of important days										
World Kitchen Garden Day	01							29	01	30
Parthenium Awareness Week	01							15	01	16
World Food Day	01							25	16	41
Women in Agriculture Day	01	02	15	17		06	06			
Kissan Samman Divas	01	45	02	47	12	01	13			
National Science Day	01	45	27	72	11	10	21			
International Womens Day	01	06		06	12	03	15			
World Water Day	01	16	01	17	03		03			
National Fish Farmers Day	01	30	05	35	29	04	33	07		07
Others										
Farm Innovators Meet	01	31	01	32	01		01			
Bi-Monthly workshop	05							173	37	210
DDFA meeting	08	184		184						
Farmers-Scientist Interactive	04	90	10	100	18	02	20	03		03
programme										
Pest Survey	03							08		08
Agriculture Technology Week	01	300	90	390	125	19	144	54	07	61
PRA	05	129		129	58		58	02		02
Publications	16									
Total	2153	6259	1727	8586	1621	518	2085	1951	410	2361

# 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)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables	Drumstick seeds	PKM-1		0.04	920-00	04
Flower crops						
Spices						
Fodder crop seeds	Guinea grass			0.2805	2935-00	20
Fiber crops						
Forest Species						
Green manure	Sumhemp seeds			0.25	1750-00	05
Total				0.5705	5605-00	29

# 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
1	2	3	4	5	6	7
Commercial						
Vegetable seedlings	Drumstick	PKM-1		3579	34010-00	42
	Curry leafs	Suhasini		500	5000-00	18
Fruits	Sapota	Kalipatti		60	1800-00	04
	Lemon	Local		510	5050-00	38
Ornamental plants						
Medicinal and Aromatic						
Plantation	Mango	Alphanso		1085	33630-00	36
Spices						
Tuber						

1	2	3	4	5	6	7
Fodder crop saplings	Fodder slips	Susbania, Subabul	DHN-6, CO-3	11590	7490-00	35
	Azolla	Azolla pinnata		0.645 q	1290-00	40
Forest Species						
Others						
Total				17324.645	88300-00	213

## 9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (Kg)	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide	Trichoderma	81	7225-00	17
Bio Agents				
Others	Vermicompost	13800	69000-00	126
	Earthworms	73.05	18375-00	45
	Banana Special	3660	549000-00	550
Total		17614.05	643600-00	738

# 9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
1	2	3	4	5
Dairy animals				
Cows				
Buffaloes				
Calves	HFx	03	2000-00	
Others				

1	2	3	4	5
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others				
Piggery				
Piglet				
Others				
Fisheries				
Fingerlings		·		
Ornamental fishes	Guppies, Mollies, Sword tails	1127	5940-00	
Total				

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

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

## (A) KVK News Letter:

Name: Taralabalu Krishi Sinchana, Quarterly, Started in October-2008

**Periodicity:** Quarterly

Sl.No.	<b>Quarterly (2013-14)</b>	Volume	Issue
1	April-June	6	3
2	July-September	6	4
3	October-December	7	1
4	January-March (2014)	7	2

**No. of copies :** 500/issue

## (B) Literature developed/published

Item	Title	Authors name	Number	
1	<b>2</b>	3	4	
Research papers	Productive agriculture applications in water logged areas – a KVK perspective –	Dr Devaraja T N		
	RECLAMATION OF SALINE AND ALKALINE SOILS THROUGH	-		
	AQUACULTURE			
<b>Technical reports</b>				
News letters	Taralabalu Krishi Sinchana	Programme Coordinator	2000	
		and All SMSs		
<b>Technical bulletins</b>			-	
Popular articles	Davanagereyalli Savayava Santhe – Sahaja Saguvali	Dr Devaraja T N		
	Dharehatti Uridode? – ASMITHA, Dept. Hoticulture, Davanagere	Dr Devaraja T N		
	Thotagarike Belegalalli Davanagere Jilleya Kela Raitara Sadhanegalu - ASMITHA,	Raghuraja J		
	Dept. Hoticulture, Davanagere			
	Davanagere Jilleya Adike Thotagalatta Ondu Nota – ASMITHA, Dept. Hoticulture,	Basavanagowda M G		
	Davanagere	_		

			rararabara rever 2
1	2	3	4
Popular articles	NICRA Yojane Ondu Nota – ASMITHA, Dept. Hoticulture, Davanagere	Mallikarjuna B O	
	Tengina Mara Hattuva Sainyavannu Kattuva Namma Prayathna ASMITHA,	Basavanagowda M G	
	Dept. Hoticulture, Davanagere		
	Kole Rogakke Ramabana Bordo Dravana – Janathavani	Basavanagowda M G	
	Parthenium Kaleya Samagra Nirvahane – Varadhan (Monthly magazine)	Mallikarjuna B O	
	Bhattadalli Yantrikruta Utpadana Paddati – Sukhibhav (Monthly magazine)	Mallikarjuna B O	
Extension	Savaya gobbara mattu oushadigalu – Information folder	Vijayakumara S B	1000
literature	Jaivika Indhana parichaya – Information folder	Dr Devaraja T N	1000
	Sinchanakke Munna – Booklet	Dr Devaraja T N	500
	Technologies Assessed and Frontline Demonstrations of Taralabalu KVK 2005-2014 – Information folder	Dr Devaraja T N	1000
	Fish cum Rice procution – Information folder	Dr Devaraja T N	1000
	Adike Beleyalli Hasirele Gobbaragala Patra – Information folder	Basavanagowda M G	1000
	Bhattadalli Elekavacha Honaguva Rogada Samagra Nirvahane – Information folder	Prasannakumara N	1000
	Bale Beleya Nati Kramagalu – Information folder	Basavanagowda M G	1000
	Baleyalli Uttama Iluvarige Taralabalu Bale Special – Information folder	Basavanagowda M G	1000
	Togariyalli Kayi Koraka Mattu Soragu Rogada Samagra Nirvahane – Information folder	Prasannakumara N	1000
	Meenu Sakane Chikangunyakke Parihara – Information folder	Dr Devaraja T N	1000
	2 Gunteya Matsya Vyavahara – Information folder	Dr Devaraja T N	1000
	Agriculture, Soil and Water: A KVK perspective – Information folder	Dr Devaraja T N	1000
	Tada Mungarinalli Kiru Dhanyagala Besaya Kramagalu – Information folder	Mallikarjuna B O	1000
	Parthenium Apayakari Kaleya Samagra Hatoti Kramagalu – Information folder	Mallikarjuna B O	1000
	Mekkejoladalli Samagra Bele Nirvahane – Information folder	Mallikarjuna B O	1000
	NICRA Yojaneya Pramuka Chatuvatikegala Ondu Pakshi Nota (2011-13) - Booklet	Mallikarjuna B O	1000
	Enrichment of low quality feeding stuffs – Information folder	Dr Jayadevappa G K	1000
	Bhattadalli Yantrikrutha Krishi – Information folder	Mallikarjuna B O	1000
Radio Talk	Management of horticulture croops during Kharif season	Basavanagowda M G	
	Land preparation for the kharif crops	Mallikarjuna B O	
	Recent production technology of onion for rabi season live programme	Basavanagowda M G	
	Production technology of summer vegetables	Basavanagowda M G	
	KVK-This year 2013-14	Dr. Devaraja T N	
	Seed production aspects in monocot & dicot plants	Vijaykumar S B	
	New trends in agriculture sector	Dr Devaraja T N	
	Organic farming	Mallikarjuna B O	

1	2	3	4
TV Programmes	Sheep management during summer and prevention of diseases in sheep	Dr. Jayadevappa G K	
	Improved production technology in Cotton to get better yield	Mallikarjuna B O	
	Seed treatment, spacing and fertilizer management in maize	Mallikarjuna B O	
	Weed management in Maize	Mallikarjuna B O	
	Role of growth regulators and micronutrient in Cotton	Mallikarjuna B O	
	Management of leaf reddening through MgSO <sub>4</sub> spray in Cotton	Mallikarjuna B O	
	Water management in Sugarcane	Mallikarjuna B O	
	Management of sucking pests and flower square drying in Cotton	Mallikarjuna B O	
	Mechanization in paddy transplanting	Mallikarjuna B O	
	Integrated management of yellow stem borer in paddy nursery	Prasannakumar N	
	Production technology of HYV Arka Suvidha Frenchbean	Basavanagowda M G	
	Fertilizer, weed and water management in paddy	Mallikarjuna B O	
	Water management and fertilizer management in Cotton	Mallikarjuna B O	
	Feed back on the Agriculture Programme in Etv-NICRA	Mallikarjuna B O	
	Sugarcane thrash management after harvesting	Mallikarjuna B O	
	Intercropping of different vegetables in Banana	Mallikarjuna B O	
	Production technology in Raddish	Mallikarjuna B O	
	Fertilizer and weed management (Cono weeder) in summer paddy	Mallikarjuna B O	
TOTAL			

## 10. B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	CD	NICRA Activities	01

#### 10.C. Success Story:

#### FARM PONDS AND PERCOLATION TANKS BOON TO THE BOREWELLS

#### [Mr. Mallikarjuna B.O., SMS (Agronomy) and Dr. Devaraja T.N., Programme Coordinator, TKVK, Davangere]

During the year 2011-12 and 2012-2013 the average rainfall of the village was around 550 mm. The major commercial crops of the village were Arecanut, Banana and Pomegranate. They mainly depend on the borewell water for the crop production. Due to low rainfall for last two years, the water level in the bore well started to decline and many borewells went dry. During the year 2013, from the month of January to March nearly 50 borewells were digged and hardly 5-6 bore wells were successful in giving water with of one inch water force.

#### Intervention of NICRA

Although with continuous efforts of KVK, the farmers were not ready to spare land for the farm ponds and bore well recharge. One farmer named Mr. Hanumanthappa, growing the major crops like Banana, Arecanut and Pomegranate in his field was depending on the bore well. In the month of February 2013, the temperature was high and all crops had required water for better growth. But all his bore wells (5No.) dried and he spent nearly 5 lakh rupees for new borewells and lost his hopes. The situation was same to nearly 15 farmers around his plot.

**FARM POND and Percolation tanks**: Mr Hanumanthappa, farmer came forward for sparing the space for the widening of the pond. During the year 2011-12, under NRM farm pond work initiated and the pond was of 67 m length X 26 m breadth X 3.5 m depth. During 2013 -14 in the month of May, there was heavy down pour of rain nearly (40mm and 60 mm for two days). The runoff from the different farmers fields collected in this farm pond. Nearly 60, 97,000 Lakh (Sixty Lakh Ninety seven thousand liters) of water had been harvested. Till today, the borewell have not dried and in addition nearly 20-25 surroundings borewells water level has been raised. The level of the water was tested by leaving the thread tied with stone by conventional method.

Another farmer by name Mr. Basvangowda expressed that due to the farm pond in the farm was very useful. During the year 2012 and 2013 even though the rainfall was very less but his bore well did not stop.

Now in the village nearly 8 ponds (5 under NICRA sponsored) and 2 cement ponds were constructed with their own money for rainwater harvesting and that water used for the different vegetables and pomegranate in summer season. Farmers expressed that we have spent nearly 50 lakh rupees for the bore wells and pipes for last two years (2012, 2013) without any result. But this year due to farm ponds, deepening of water ways, deepening of the tanks (Percolation) and trench cum bunds the rainwater had been harvested.

By using the water from the farm ponds the crops like cotton and vegetables (Cucumber and Chilli) were grown. Some farmers provided water to tomato during the critical stages of the crop during the summer.

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

- a) **Cultivation of intercrops in Banana plots:** We have demonstrated the production of Radish, Bhendi, Clusterbeans, Frenchbeans as intercrop in Banana plots for the first time at KVK instructional farm.
- b) **Cultivation of marigold flower in TKVK:** Marigold was grown in small area targeting local festivals which fetched better price. This technology was inspired many visiting farmers to emulate the same in their farms in next season.

Area	Cost of production (Rs.)	Gross Returns (Rs.)	Net return (Rs.)
6 guntas	6000-00	22500-00	16500-00

- c) **Avenue planting of Drumstick plants:** In KVK farm has attracted many farmers and citizens alike. This earned a substantial income to Revolving Fund of KVK.
- d) **Lemon grass herbal drink grown in KVK:** This has replaced milk tea in our KVK hostel saving on milk, tea powder and even sugar. Farmers, general visitors and VIPs too have appreciated the herbal drink and shown interest in taking a sapling of the same for their garden.
- e) Saturday Organic Bazzar (Saavayava Shanivara Santhe): Weekly sandy held at TKVK on every Saturday helped organic farmers and the enthusiastic consumers of organic produce as it is made available next door.
- f) Sahaja Krishi Balaga Davanagere (SKB-D): Promotion of Natural Farming activities through practicing farmers and the inquisitive farmers. Monthly meetings/visit is organized by KVK.
- g) **Techno cards and stickers:** First time, cards and stickers of palm size are developed by TKVK to spread the technologies through punch lines or bullet lines.
- h) **Special training for Farm Facilitators:** KVK took initiative in organizing special trainings to Farm Facilitators from all six talukas of our district. This has impressed the Department of Agriculture and they have made it a mandatory activity this as well.

#### 10. E. Details of indigenous technology practiced by the farmer in the KVK operational area which can be considered for technology:

#### 1. Innovative intercropping and marketing of turmeric:

Name and Address: Sri Shankara Murthy

Lingadhalli, Nallur-post

Channagiri tq., Davanagere dist.

Mob.: 9686563061

**Age**: 48 years **Education**: SSLC

Land Holding: 11.75 acres

Crops grown: Maize, Ragi, Redgram, Field bean, Niger, Mustard, Arecanut, Coconut, Turmeric, Rose, Marigold, Mango, Sapota, Jack.

**Livestock:** 5 sheeps and 5 goats and Azolla unit

Social recognition: Winner "Krishi Pandith award", GoK, 2012

**Description of Innovation:** Sri Shankaramurthy has been engaged in agriculture since his childhood. Highly innovative in nature and ready to venture in to new areas of agriculture. He brought *surabhi* variety of turmeric from Tamil Nadu and grown as intercrop in arecanut in 3 acres. Turmeric was new crop in the district. For the first time he conceptualized the idea during exposure visit to Krishimela organized at UAS, Bengaluru.

**Practical utility of innovation:** Normal practice of the farmer in the district in case of intercrop in arecanut is to go for banana or betel vine or sole crop. Sri Shankar Murthy introduced turmeric as intercrop in arecanut in his 3 acre plantation. In all he obtained 900 q. of turmeric sold as planting material and earned Rs. 27.00 laksh (Rs. 3000/q). Since turmeric is new crop in this area he sold entire produce as planting material to farmers of the district.

#### 2. Conservation of rice varieties and millets:

Name and Address: Sri A.N. Anjaneya

Kumbalore -post

Harihar – tq.

Davanagere – dist. Mo.: 9972088929

**Age**: 35 years **Education**: PUC

Land Holding: 7.50 acres

Crops grown: Rice, ragi, coconut, arecanut, black gram, green manur crops,

Livestock: 4 cows.

Social recognition: President, Sharana Muddana Savayava Krishikara balaga, Kumbaluru. Krishi Pandith award, GoK, 2010-11. 'Krishi Rathan' award,

Karnataka Samskruthika Academy, Bangalore-2011

**Description of Innovation:** Sri Anjeneya A.N. has developed unique interest in conserving traditional varieties of rice since past 8 years. He has grown and preserved 150 traditional varieties, out of these he has produced 60 traditional varieties in large quantity and sold for seed and consumption purpose. All these varieties are grown organically without the application of fertilizers and pesticides. Every year he has sold nearly 5 q of rice for seeds purpose pricing Rs. 10 more than that of other varieties.

**Examples of conserved varieties:** Local Basumathi, Rajamudi, Chinnaponni, Rathnachudi, Navara, Selem sanna, Bangara sanna, Navile bhatha, Sugandha bhatha, Raja bhoga, Gandha saale, Andra basumathi, Siddasaale, Padma rekha, Gouri bhatha,

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

#### 10.G. Field activities

i. Number of villages adopted : 03

ii. No. of farm families selected : 478

iii. No. of survey/PRA conducted: 05

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

**Status of establishment of Lab** : Established

1. Year of establishment : 2011 (April)

2. List of equipments purchased with amount

Sl. No.	Name of the Equipment	Qty.	Cost (Rs.)
1	Digital conductivity meter	01	12,860-00
2	Digital pH meter	01	11,033-00
3	Flame photometer	01	48,375-00
4.	Spectrophotometer	01	42,570-00
5.	Macro Block digestion system: KIL 08 L	01	96,212-00
6.	Distillation system KJELO DIST EAS VA	01	1,77,268-00
7.	Digital Burette Titration system	01	53,212-00
8.	Quartz single distillation model with 4 l/h capacity	01	31,482-00
9.	Quartz double distillation unit with 1.5 l/h capacity	01	64,130-00
10.	Hot air oven	01	29,786-00
11.	Hot plate Rectangular	01	6,784-00
12.	Water bath	01	5,724-00
13.	Digital Analytical balance capacity 210 g	01	69,960-00
14.	Table top balance capacity 10 kg	01	6,890-00
15.	Heating mantle capacity 250 ml	01	1,908-00
16.	Kent water purifier	01	16,500-00
	Total 15 6,74,69		

#### 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	1480	1248	386	1,32,981/-
Water Samples	848	690	284	37,350/-
Plant samples				
Manure samples	05	03	02	500/-
Total	2333	1941	672	1,70,831/-

#### Details of samples analyzed during the 2013-14:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	504	385	153	27,031/-
Water Samples	311	203	97	13,250/-
Plant samples				
Manure samples	05	03	02	500/-
Total	820	591	252	40,781/-

#### 10.I. Technology Week celebration during 2013-14: Yes

**Period of observing Technology Week**: From 02-09-2013 to 07-09-2013

**Total number of farmers participated**: 595

**Total number of agencies involved**: 06 (Dept. Agriculture, Dept. of Horticulture, District Krishika Samaja, SKDRDP, Sahara and Madari NGO)

Number of demonstrations visited by the farmers: 06

# **Other Details**

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized	06	595	Cotton, Maize, Ragi, Vegetables, Banana, Arecanut, Coconut, Azolla and Dairying
Exhibition	06	1500	Organic farming, Mechanization, Dairy technologies, SHGs
Film show	06	595	Organic farming, Green manuring and Integrated Crop Management practices
Fair			
Farm Visit	06	595	
Diagnostic Practical			
Supply of Literature (No.)	06	595	
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week		> 2500	

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

# A. Introduction of alternate crops/varieties:

State	Crops/cultivars	Area (ha)	Number of beneficiaries
Karnataka	Ragi – GPU-48	06	15
Karnataka	Drumstick – KDM-1	03	08

## B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops	0.4 ha (Plastic	01
	mulching	
Tuber crops		
Total		

# C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Karnataka	Dairy	08	184
Total		08	184

# D. Animal health camps organized

State	Number of camps	No. of animals	No.of farmers
Karnataka	02	293	94
Total	02	293	94

# E. Seed distribution in drought hit states: NIL

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

# F. Large scale adoption of resource conservation technologies : NIL

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

# G. Awareness campaign

State	Meet	tings	Gost	thies	Fie	ld days	Farme	rs fair	Exhibi	ition	Fili	n show
	No.	No.of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
Karnataka	03	36			09	264	03	More than 5000 farmers	06	2203	34	1260
Total	03	36			09	264	03	> 5000	06	2203	34	1260

#### **PART XI. IMPACT**

#### 11.A. Impact of KVK activities:

Name of specific technology/skill	No. of	% of adoption	Change in i	ncome (Rs.)
transferred	participants		Before (Rs./Unit)	After (Rs./Unit)
Vermicomposting	45	13	-	-
Use of <i>Goniozus nephentidis</i> for management of black headed caterpillar in coconut	01	100	72000-00	252000-00
Integrated crop management in Cotton (FLD)	150	1	Area ( 2002-03): 4667 ha	Area (2008-09) 12640 ha

11.B. Cases of large scale adoption: NIL

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

#### Impact of training on 'Coconut Climbing Skill Development and Plant Protection' on Rural Youth.

Taralabalu Krishi Vigyan Kenda, Davanagere conducted short term vocational training on 'Coconut Climbing Skill Development and Plant Protection measures' for Rural Youth. The training programme was conducted in collaboration with Department of Horticulture, Davanagere and financial assistance by Coconut Development Board, Bangalore. In 2012-13 during the first phase of the training, 60 rural youth were trained in 3 batches for 6 days each. (1st batch: 10-15 December 2012, 2nd batch: 11-16 February 2013 and 3nd batch: 11-16 March 2013). Pre-training information from the youth regarding occupation, number of trees climbed per day, means of climbing, earnings, identification of pest and diseases were collected. This vocational training was popularly termed as Friends of Coconut Tree (FOCT) Training programme.

During the training programme, following topics namely, Introduction and Production Technology of Coconut, Coconut Waste Management, Pest and Disease Management, Nutrient Management, Role of Green Manure crops, Harvesting and Post Harvesting Technologies, Leadership Qualities, Communication Skills, Time Management, Decision Taking Ability, First Aid Information, Banking, Insurance, Climbing Machine Parts, Working Mechanism and Trials and followed by rigorous practiced sessions.

After one year, the rural youths were surveyed and information including the problems/constraints faced by them were collected. The findings of the survey are as follows:

Table-1: Coconut climbing as an occupation by the youth

Main occupation		Subsidiary	occupation	Not as occupation		
No.	%	No.	%	No.	%	
14	23.3	20	33.3	26	43.4	

Majority (43.4%) of youths are not having coconut climbing as main occupation, where as 33.3% trainees as subsidiary and only 23.3% trainees as main occupation and have previous experience of tree climbing.

**Table-2: Means of Coconut Climbing** 

(n=60) (n=60)

Means of	Before	training	After training		
climbing	No.	%	No.	%	
Using bare hands	23	38.4			
Using	27	45.0			
thread/cloth					
Not climbing at	10	16.6			
all					
Using machine			60	100	

Before undergoing training 45% of youth have used thread/cloth as means of climbing and 38.4% with bare hands. After the training, cent percent youths used the machine provided by the Coconut Development Board for climbing. This implies that youths find it easy to climb by using machine. Less injuries, rough skin observed before are improved along with safety of the climbers through the use of machine.

Table-3: Average number of trees climbed per day

Before training (No. of trees)	After training (No. of trees)	% of improvement
10	29	290

It is evident that there has been 3 fold increase in number of trees climbed before training (10 No.s) and after training (29 No.s) using the machine. In addition to increase in number of trees climbed, less number of injuries, less tiredness and even in rainy season trees can be climbed.

Table-4: Average earnings by the youths in a month

Before training (Rs.)	After training (Rs.)	% Increase
1965-00	5690-00	289

The details of average earnings of youth reveals that there has been 3 times increase in monthly earnings from Rs. 1965-00 / per to Rs.5690-00 per month among the commercial climbers. There are incidence that few individuals have earned Rs. 10000-00 to 15000-00 per month depending upon the number of trees climbed and few youths are not getting enough business every day and they need to travel to different villages.

Table-5: Distribution of youth based on the purpose of tree climbing

Before training (n=60)					After training (n=60)								
No pract climb	ticed	O	wn		rs for nings	aı	own nd ners	0	wn	Other earn		aı	own nd ners
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
10	16.6	10	16.6	29	48.4	11	18.4	10	16.6	35	58.4	15	24.8

Nearly 48% of youths before training were practiced climbing for earning and it is increased to 58% after training. Those youths (16.6%) who are not climbing at all started climbing for one or other purpose. And 16.6% youth who are climbing in their own fields continued so even after training. There has been increase in number of youth from 18.4% to 24.8% with regard to category belongs to trees climbed for own purpose and in others field for earning after the training.

Table-6: Identification of Coconut pest and disease by the youth

Before training (n=60)		After training (n=60)		
No.	%	No.	%	
12	20	60	100	

Only 20% of youth identified the pest and disease in Coconut before the training given to them and cent percent identified the same after the training. During the training the youth were given information on pest and disease and their management and to clean the crown part of the tree.

Table-7: Constraints/problems faced by the trainees

(n=60)

Problems/Constraints	No.	%	Rank
Not received insurance bond	14	23.3	04
Wrong entries in insurance bond	11	18.3	05
Less injuries and easy to climb	49	81.7	02
Need for improvement in machine	55	91.6	01
Not getting business every day	15	25.0	03
Problem of movement	09	15.0	06

The above table reveals that nearly 92% of the youth felt that the machine needs improvement. These youth were given information on the improved version of climbing machines from CPCRI and TNAU. Since these were the first batches, the machine provided to them was not suitable for the trees having bigger trunk size. The safety belt used to lock legs were damaged frequently. The weight of the machine was earlier 10 kg which was brought down to 8.6 kg after feed back from our KVK to CDB and the machine manufacturers. Vowing to the popularity and significance of the training programme, 140 more rural youth have been trained by our KVK in 2013-14. It is clear that injuries are less when compared to climbing of the trees using thread/wire or by bare hands and felt it is easy to climb by using machine, this is evident when we observed the increased number of tree climbed after the training compared to before training. Not getting business every day, not received insurance bond and wrong entries in the bond paper are the other constraints reported by the youth. Feedback from the youth collected and sent to Coconut Development Board, Bangalore for further action in this regard.

The week long training conducted by the KVK to bring desirable changes in behaviour of the youth resulted in increased income levels and earning throughout the year. Since using machine, trees can be climbed even in rainy season also. Coconut growers who are facing problem in timely harvesting are relieved so much of their problem because these trained youth are available for their service. The KVK has given wide publicity through Horticulture Department and through news papers displaying the climbers name and address, who can be contacted by the Coconut growers. The chart with the details of these expert climbers is displayed in KVK for the benefit of all.

# 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 Camps, Input for FLD
Department of Agriculture, Davanagere including ATMA.	Trainings, Field visits, Diagnostic field visits, Field day, Lectures, bi-monthly
	meetings, Agriculture technology week celebration and agriculture surveys, Short
	term project.
Department Horticulture, Davanagere	Trainings, Field visits, Diagnostic field visits, CHD programmes (Field visits,
	Seminars, Workshops)
Department of fisheries, Davanagere	Trainings, Field visits
Department of forestry, Davanagere	Supply of seedlings
Karnataka State Seed Corporation	Supply of seed materials for FLDs
Department of Social Welfare	Programme participation
District Information centre	Collection of basic information of the district
Canara Bank, State Bank of India, State Bank of Mysore, Shiva Sahakari Bank,	SHG A/C and KVK A/C
University of Agricultural Sciences, Bangalore, Dharwad	Technology transfer, Knowledge update, HRD of KVK staff,
University of Agriculture and Horticulture Sciences, Shimoga	Technology transfer, Knowledge update
University of Horticultural Sciences, Bagalkot	Supply planting material
IGFRI, Dharwad	Supply inputs to FLDs
Zilla Panchayath, Davanagere	Trainings under various programmes
ZARS, Chitradurga	Technology transfer, Knowledge update
Karnataka Antibiotics and Pharmaceutical Ltd., Bangalore	Workshops/Training and inputs
CDB, Bangalore	Trainings
WALMI, Dharwad	Trainings
KVKs of Shimoga, Mandya, Chitradurga, Tumkur A, Gadag, Belgaum and Mysore	Interaction and exchange of ideas

### 12.B. List Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
	Demonstrations, Training, NRM	February – 2011 (Ongoing)	ICAR	6,44,114-00
NICRA	works, Exposure visits and Climate			
	Resilient Technologies			
	Training, Awareness campaign	April -2011 (Ongoing)	Karanataka State	
Biofuel Information and Demonstration Centre	Demonstration, Exhibitions and		Biofuel Development	7,90,000-00
	Research		Boad, GoK	
Coconut Development Board, Bangalore	Training	December - 2012	CDB, Bangalore	4,67,500-00

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

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

Visited villages and collected basic data for preparation of SREP

### Coordination activities between KVK and ATMA during 2013-14

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	Action plan 2013-14	01		
02	Research projects	Demonstration of breeding of carps and hatchery		01	This year received Rs. 50,000/- and completed
		management			two year project.
03	Training programmes				
04	Demonstrations				
05	<b>Extension Programmes</b>				
	Kisan Mela				
	Technology Week	Seminars, Workshops, Field visits		06	
	Exposure visit				
	Exhibition				
	Soil health camps				

					raraiabaia KVIK, Bavariag
	Animal Health Campaig	gns			
	Field day	Tomato & Papaya	02		
06	Publications				
	Video Films				
	Books				
	Extension Literature	Information folder		02	
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl.				
	specify)				
	Watershed approach				
	Integrated Farm				
	Development				
	Agri-preneurs				
	development				

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

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

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

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

## 12.F. Details of linkage with RKVY: NIL

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

# 12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent (To Registered farmers)	No. of feedback / query on SMS sent
April 2013			
May 2013	03	200	
June 2013	03	200	
July 2013	04	250	
August 2013	01	200	
September 2013	10	1200	
October 2013	28	1200	
November 2013	09	1200	
December 2013			
January 2014	01	50	
February 2014			
March 2014			
Total for the year 2013-14	59		

# PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

		Year of	Amaa	Details of production			Amou	ınt (Rs.)	
Sl. No.	Demo Unit	establishment	Area (ha)	Variety	Produce	Qty.	Cost of inputs	Gross income	Remarks
1.	Banana Special	2011-12	-	-	Banana Special	3660 kg	138260-00	549000-00	
2.	Trichoderma	2013-14			Trichoderma	81 kg	3540-00	7225-00	
3.	Horticulture	2009-10	0.1	Local	Curry leaf	500 No.	59273-00	79490-00	
	Nursery			PKM-1	Drumstick	3579 No.			
				Alphanso	Mango	1085 No.			
				Kalipatti	Sapota	60 No.			
				Local	Lemon	510 No.			

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

Name		5	a _ a	Deta	ails of production		Amoun	t (Rs.)	
of the crop	Date of sowing	Date of harvest	Are a (ha)	Variety	<b>Type of Produce</b>	Qty.	<b>Cost of inputs</b>	<b>Gross income</b>	Remarks
Cereals									
Ragi	08-07-2013	30-11-2013	0.5	GPU-48	Seed	8.5 q	5600-00	8500-00	
Pulses									
Redgram	30-05-2013	16-01-2014	0.5	BRG-2	Seed	04 q	6300-00	12000-00	
Oilseeds									
Fibers									
Spices & Plantation	crops	1	-				<u> </u>		
Floriculture									
Fruits									
Vegetables									
Brinjal	08-06-2013	20-10-2013	0.5	Mohini	Fruit	2.8 q	2800-00	4200-00	
Bhendi	01-06-2013	20-10-2013	0.5	Arka Anamik	Fruit	6.80 q	6800-00	10000-00	
Tomato	06-06-2013	18-10-2013	0.5	Arka Vikas	Fruit	2 t	8800-00	10200-00	
<b>Commercial Crops</b>							<u> </u>		
Sugarcane	10-11-2012	30-11-2013	02	CO86032	For Sugar	113 t	80000-00	140000-00	

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

Sl.			Amount	t ( <b>Rs.</b> )	
No.	Name of the Product	Qty	Cost of inputs	Gross income	Remarks
1	Trichoderma	81 kg	3540-00	7225-00	

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

Sl.	Name	Detail	s of production		Amoun	nt (Rs.)	
No	of the animal / bird / aquatics	Breed	<b>Type of Produce</b>	Qty.	Cost of inputs	Gross income	Remarks
1	Crossbred Cow Dairy	HF X	Milk	12572 liter	2,88,000-00	3,37,652-00	We need to introduce pedigree animal to improve the milk production and there by gross income
2	Varietal Fodder plots demo unit	DHN-6 Guinea Grass (BG-9) Co-3 Napier	Root slips	11590 No.		7490-00	
3	Azolla Demo Unit	Azolla pinnata	Azolla plant	64.5 Kg		1290-00	
4	Vermiculture and vermicompost demo unit	Eudrilus Sp.	Compost  Earthworms	138 q 73.05 kg	53780-00	87375-00	
5	Sheep demo unit	Bellary X	Sheep				
6	Hatchery	Indian major carps, Grass carps	Advanced fish fingerlings				
7	Ornamental Fish Production Unit	Guppies, Mollies, Sword tails, Platy, Gambusia, Sucker cat fish	Ornamental fishes	1127 No.	1554-00	5940-00	
8	Fish poly culture unit	Catla, Rohu, Common carps, Pangasius	Food fishes	290 Kg	15637-00	20360-00	

### 13. E. Utilization of hostel facilities

## Accommodation available (No. of beds): 35

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall
April-2013	57	02	
May-2013	76	03	
June-2013	59	02	
July-2013	925	25	
August-2013	208	06	
September-2013	107	07	
October-2013	275	15	
November-2013	20	01	
December-2013	40	06	
January-2014	107	08	
February-2014	298	03	
March-2014	160	09	
Total	2332	87	

# 13. F. Database management

Sl. No	Database target	Database created
1	• Data base on Soil test, Water test, Radio talk, TV talk and Guest lecture.	<ul> <li>Updating is continues with these database.</li> </ul>
2	<ul> <li>Database on training, FLD, OFT and others.</li> </ul>	Updating of data is ongoing

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

Amount	Expenditure	Details of	Activities conducted					Quantity of	Area
sanction	( <b>Rs.</b> )	infrastructure	No. of Training No. of No. of plant Visit by		Visit by	Visit by	water	irrigated /	
( <b>Rs.</b> )		created / micro	programmes Demonstrations		materials	farmers	officials	harvested in	utilization
		irrigation system etc.	р		produced	(No.)	(No.)	'000 litres	pattern

### 13.H. Farmers Field School

### a) Banana (2012-13)

**Technology**: Integrated Crop Management in Banana

Area : 1 acre

**Collaborator** : Mr. Narappa K.G.

Participants : 25

**Facilitator** : SMS (Agriculture Extension, Horticulture, Plant Protection, Agronomy)

Place : Kenchanahalli, Harihara taluk

### **Number and details of activities**

Sl.No.	DATE	Activities				
1	03-07-2012	Group meeting and farmers selection				
2	06-08-2012	Sucker selection and their treatment				
3	22-10-2012	Integrated Nutrient Management				
4	20-12-2012	Micronutrient and fertilizer management				
5	17-01-2013	Precession farming activities				
6	22-02-2013	Bunch feeding of Banana Special				

#### **Results:**

Yield	(q/ha)	0/ of in one age	D.C. matia	
Demo	Check	% of increase	B:C ratio	
210	164	28.04	3.69	
			2.78	

### b) Arecanut (2013-14)

**Technology**: Integrated Crop Management in Arecanut

Area : 1 acre

**Collaborator**: Mr. Bairesh

Participants: 25

Facilitator : SMS (Agriculture Extension, Horticulture, Plant Protection, Agronomy and Soil Science)

Place : Billahalli, Channagiri taluk

### Number and details of activities

Sl.No.	DATE	Activities
1	11-07-2013	Group meeting and farmers selection
2	19-08-2013	Integrated Nutrient Management in Arecanut
3	16-11-2013	Importance of intercrops in Arecanut
4	21-11-2013	• Exposure visit to UAHS, Shimoga and Agriculture and Horticulture Crop Research Station, Thirthahalli
5	20-12-2013	Integrated Pest and Disease Management
6	18-01-2013	• Field Day

**Results :** Yet to compile yield data. Green manure crop velvet beans is in harvesting stage.

# 13.I. a) Integrated Farming System in Dryland Horticulture

Name of the farmer, Land holding	Existing crop / enterprises	KVK inte	rvention
and Annual Income (Rs) 2011-12		2012-13	2013-14
Sri Mallikarjuna V.,	Coconut, Arecanut, Oil palm, Cocoa, Drumstick,	Drumstick, Sapota, Mango	Drumstick, velvet beans
Kondajji, Harihar-tq.	Sapota, Turmeric and Vermicompost	and Curry leaves seedlings	and azolla unit
4.1 ha			
4,10,000/-			
Sri Shikari Balappa,	Maize, Ragi, Redgram, Sorghum, Groundnut, Dryland	Mango, Sapota and Lemon	Sheep and Azolla unit
Kurubagere, Harapanahalli tq.	paddy, Mango, Sapota, Dairy, Sheep rearing and	seedlings	
4 ha.	Vermicompost		
3,50,000/-			
Sri Arunkumar G.C.	Maize, Ragi, Redgram, Sorghum, Field bean, Cotton,	Sapota, Guava, tamarind	Drumstick , Tamarind,
Bilchod, Jagaluru tq.	Tamarind , Banana, Guava, Marigold, Tomato, Chilli,	seedlings	Guava, Sapota and Azolla
9.2 ha.	Drumstick, Apiculture, Cowpea, Mango, Sapota,		unit
8,00,000/-	Coconut, Arecanut, Dairy and Vermicompost		
Sri Shankaramurthy N.S.	Maize, Ragi, Redgram, Field bean, Niger, Mustard,	Vermicompost unit and	Fish pond and Azolla unit
Lingadahalli, Channagiri tq.	Arecanut, Coconut, Turmeric, Rose, Button rose,	sheep rearing unit	
4.7 ha.	Marigold,		
12,00,000/-			
Sri Onkarappa G.,	Maize, Ragi, Cotton, Groundnut, Mango, Sapota,	Mango, Sapota, Jack fruit	Musambi, Guava
S. Mallapura, Honnali tq.	Coconut, Oil palm, Drumstick, Papaya, Jamoon,	and Orange seedlings	seedlings and Azolla unit
3.6 ha.	Tamarind, Cluster bean, Brinjal, Chilli, Betelvine,		
4,50,000/-	Cucumber, Beans, Cabbage, Onion, Silver oak, Bio-		
	Digester, Vermicompost unit and Dairy		
Sri Dyamappa H.D.	Maize, Cotton, Cucumber, Pumpkin, Chilli, Cowpea,	Mango, Jack fruit seedlings	Lemon, Sapota seedlings
Haluvarthy, Davanagere tq.	Rose, Papaya, Arecanut, Dairy, Poultry and Poultry feed	and Vermicompost unit	and Azolla unit
6 ha.	maker		
10,00,000/-			

### 13.I. b) Innovative Programme:

### **Davanagere Dairy Farmers Association (DDFA):**

- Monthly meeting to discuss the issues and decide about the viable solution to each problem.
- Technical seminar will be organized in the subject of farmers interest.
- Pharmaceutical Co., Feed Co., Dairy industry representatives will also participate and give knowledge on their products.
- Currently, for establishing AI Centres, sales out let, educational tours, workshops and seminars.
- Outcome from last year's work:
  - > One AI entrepreneur is trained and 350 animals have been inseminated with a success rate of 40 %.
  - > Sale unit established at KVK
  - ➤ Sale of Clean and quality milk 60 L/day
  - ➤ Sale of quality fodder seeds, worth Rs.50,000/-
  - > Sale of Vitamins and Minerals supplements, worth Rs.80,000/-
  - ➤ 12 monthly meetings
  - ➤ 2 technical seminars
  - ➤ 1 field day on fodder crop
  - ➤ 1 Calf rally
  - ➤ 2 animal health camps

# PART XIV - FINANCIAL PERFORMANCE

### 14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Canara Bank	Vidyanagara DAVANAGERE 577 004	1813	Taralabalu Rural Development foundation	1813101010143	0577015007	CNRB 0001813
With KVK	State Bank of India	PJ Extension DAVANAGERE 577 002	5624	Taralabalu Krishi Vigyan Kendra	30166599498	577002002	SBIN 0005624
	Canara Bank	Vidyanagar DAVANAGERE 577 004	1813	Taralabalu Krishi Vigyan Kendra (Salary)	1813101010144	0577015007	CNRB 0001813
	Canara Bank	Vidyanagar DAVANAGERE 577 004	1813	Taralabalu Krishi Vigyan Kendra (Activities)	1813101010145	0577015007	CNRB 0001813

# 14.B. Utilization of KVK funds during the year 2013-14 (Rs. in lakh)

S.No.	Particulars	Sanctioned	Released	Expenditure
A. Recu	urring Contingencies		<u> </u>	
1	Pay & Allowances	86.700	86.270	86.713
2	Traveling allowances	0.800	0.800	0.799
3	Contingencies			
$\boldsymbol{A}$	Stationery, telephone, postage and other expenditure on office running,			
	publication of Newsletter and library maintenance (Purchase of News Paper &	2 000	2 000	1.007
	Magazines)	2.000	2.000	1.997
B	POL, repair of vehicles, tractor and equipments	1.700	1.700	1.699
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.600	0.600	0.598
D	Training material (posters, charts, demonstration material including chemicals			
	etc. required for conducting the training)	0.800	0.800	0.800
E	Frontline demonstration except oilseeds and pulses (minimum of 30			
	demonstration in a year)	3.000	3.000	2.999
F	On farm testing (on need based, location specific and newly generated			
	information in the major production systems of the area)	1.000	1.000	0.999
G	Training of extension functionaries	0.200	0.200	0.199
H	Maintenance of buildings	0.350	0.350	0.349
I	Establishment of Soil, Plant & Water Testing Laboratory	0.000	0.000	0.000
J	Library	0.050	0.050	0.050
K	Extension Activities	0.500	0.500	0.499
L	Farmers Field School	0.300	0.300	0.299
	TOTAL (A)	98.000	97.570	98.000
R Non.	-Recurring Contingencies			
1	Works	0.000	0.000	0.000
2	Equipments including SWTL & Furniture	0.000	0.000	0.000
3	Vehicle (Four wheeler/Two wheeler, please specify)	0.000	0.000	0.000
4	Library (Purchase of assets like books & journals)	0.000	0.000	0.000
	TOTAL (B)	0.000	0.000	0.000
C. REV	OLVING FUND			
	GRAND TOTAL (A+B+C)	98.000	97.570	98.000

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on corresponding year
April 2011 to March 2012	0.695	41.291	40.339	1.647
April 2012 to March 2013	1.647	33.193	32.898	1.942
April 2013 to March 2014	1.942	29.733	26.432	5.243

# 15. Details of HRD activities attended by KVK staff during 2013-14

Name of the staff	Designation	Title of the training programme	<b>Institute where attended</b>	Dates
Santhosh B	Programme Assistant (Computer)	Enhancement of programme skills using	UAS (D)	19-31, August 2013
		SQL, Visual Studio.Net and Ajax		
Dr Devaraja T N	Progamme Coordinator	Review workshop on Administrative	KVK, Coimbatore	20-21, February 2014
		and Financial procedures for NGO		-
Mallikarjuna S Gudihindala	Assistant	KVKs		

#### 16. Any other important and relevant information which has not been reflected above:

#### • National Conference Participation:

- Fish cum paddy farming: Enhancing water productivity in water logged areas- Dr. Devaraja T.N., Dr. Shivakumar Magada and Dr. Swamy A.V. Research paper presented in National Conference on 'Strategies for bridging the yield gap in fisheries and aquaculture (24-25, March 2014, College of Fisheries, Mangalore.
- ➤ Economics of fish culture through timeline in India Points to ponder Gireesha Onkar and Dr. Devaraja T.N. a technical poster presented at National Conference on 'Strategies for bridging the yield gap in fisheries and aquaculture (24-25, March 2014, College of Fisheries, Mangalore.

#### • Farm Trial:

**SMS Involved:** Mr. Mallikarjuna B.O., SMS (Agronomy)

Title: Performance of Castor Hybrids

Collaboration: University of Agricultural Sciences, Bangalore

Crop	Village	No. of farmers	Hybrid	Yield (q/ha)		% increase	B:C Ratio
				Demo	Check		
Castor	Siddanuru	03	НСН-6	14.5		18.6	3.47
	Kakanuru						
	Davanagere		DCH-177		11.5		2.81

- In order to motivate pre-university pass out (33) students to join Agricultural and Horticulture University, one day training programme on basic agriculture to prepare them for practical test was organised.
- KVK guided 5 BCA students from Bapuji Institute of Hi-Tech Eduction, Davanagere for undergoing project titled 'GO BACK TO VILLAGES (GBTV) to perceive their degree
- KVK has initiated 'Saturday Organic Fair' on every Saturday where organically grown vegetables, cereals, pulses, minor millets etc were directly sold to consumers by the farmers.
- In collaboration with Karuna Jeeva Kalyan Trust, Davanagere organized Farmers-Scientists interaction programme on 'practical problems of Indian Agriculture and their management'. The Programme was addressed by Dr. Khadar retired IISc Scientist.
- Celebrated 'Parthenium Awareness Week' by making parthenium free campus and all KVK staff involved in this programme.
- Organized workshop on 'Natural Farming' where in natural farming practicing farmers shared their experiences infront of interested farmers.

- Celebrated 'National Fish Farmers Day' on 10-07-2013 in collaboration with Fisheries Department, Davanagere.
- Celebrated 'World Food Day' on 17-10-2013 in collaboration with Department of Agriculture, Davanagere.
- Conducted 5 Participatory Rural Appraisal (PRA) in 5 blocks to identify problems in different crops and based on the problems identified, action plan 2014-15 was prepared.
- Celebrated 'Women in Agriculture Day' in collaboration with Bapuji Polytechnic, Davanagere on 04-12-2013.
- Celebrated 'Kissan Samman Diwas' in collaboration with Department of Fisheries, Davanagere on 23-12-2013. A state level symposium on 'Recent Advances in Inland Aquaculture' was organized with the financial Co assistance from Karnataka State Science and Technology, Bagalore.
- Conducted 'Ex-trainees Sammelan' on 21-01-2014 for trainees of 'Coconut Climbing and Plant Protection training sponsored by 'Coconut Development Board', Bangalore. Feedback from the extrainees were sent to CDB, Bangalore.
- Celebrated 'World Environment Day' on 05-06-2013 in collaboration with Karnataka State Biofuel Development Board, Bangalore at Maganuru Basappa School, Davanagere.
- Celebrated 'National Science Day' on 28-02-2014 with Sri. Chikkanahalli Doddappa High School, Davanagere.
- Organized 'Farm Innovators Meet' on the occasion of 'International Women's Day' on 08-03-2014. Innovative farmers of the district shared their innovative technologies adopted by them.
- 'World Water Day' was celebrated in collaboration with Karuna Jeeva Kalyan Trust, Davanagere at Siddanur, NICRA project village on 22-03-2014.
- Organized 'Soil Health Campaign' at Kuremaganahalli village, one of the cluster village identified for the KVK activities to be carried out in 2014-15 on 26-03-2014.
- Extension functionaries trainings 30 Horticulture Department personnel, 89 farm facilitators working under Bhoochetana programmes, 37 Sericulture Department personnel shifted to Agriculture Department and 37 officials of AH and VS, Davanagere.
- Organized farmers-scientist interactive programme on "Problems and Prospects in paddy" in collaboration with WALMI, Dharwad on 26-08-2014.
- Organised Research-Farmer-Extension interface programme on Coconut and Arecanut in Karnataka on 25-09-2013 in collaboration with CPCRI, Kasaragodu and Horticulture Department, Davanagere. A total of 184 Coconut and Arecanut growers participated in the programme.
- Conducted 5 Friends of Coconut Tree training for 100 rural unemployed youth on 'Palm Climbing' and Plant Protection' sponsored by CDB, Bangalore and NRLM, ZP, Davanagere.
- Formation of SKB-D (Sahaja Krishi Bala Davanagere) for farmers interested in Natural and Organic Farming.
- SMS (Agronomy) delivered lecture on "Integrated Nutrient Management in Paddy" in collaboration with SPIC conducted at Halebisleri, Davanagere Taluk.
- SMS (Agronomy) delivered lecture on "Improved Agronomic Practices in Summer Field Crops" in seminar organised by KRIBHCO at Hiremegalagere, Harapanahalli taluk.
- SMS (Agronomy) delivered lecture on "Mechanisation in Paddy production system for increase in yield" training programme in collaboration with MCF, Davanagere at KVK.
- Mr. Mallilkarjuna B.O. attended and delivered lecture on "Organic Farming" organised by NSS camp, Davanagere University at Mitlakatte.
- SMS (Agronomy) conducted field visit with officers of Dhanuka Pvt. Ltd. to "Post emergent weedicide in Maize" plot at Tholahunase, Davanagere taluk.

#### **Biofuel Information and Demonstration Centre:**

- Conducted 27 trainings on 'Biofuel to Gram Panchayath officials and elected members' for 818 members from 169 Gram Panchayaths of the district.
- Assisted engineering college student to work on various projects related to Bio-diesel production, Engine efficiency.
- Conducted awareness programme for Farmers, College, High School and Primary School on Bio-Fuel and Biofuel usage
- Conducted workshop on 'Bio-Fuel' in eve of 'The World Environmental Day'
- Celebrated 'World Bio-Fuel Day' in collaboration with Zilla Panchayath, Forest Department and Spoorthi NGO on August 13<sup>th</sup>, 2013 at Kanvakuppe village in Jagalur Taluk
- Participated in Exhibitions organized by Horticutlure Department at Davanagere, World Bio-Fuel Day at Kanvakuppe village in Jagalur taluk, Krishimela organized by Agriculture Department and Krishi Utsav at Shiggaon town in Haveri Dist.
- Produced around 500 liter of bio-fuel and the 80% of bio-diesel utilized for office vehicles i.e. office jeep, Farm Tractor, Farm Power Tiller, Office Generator (Blended 10% with natural diesel) and around 20% is sold outside. Cake obtained is utilized for farm as organic manure.

#### **NICRA Project:**

- Conducted 2 animal health camps and treated 293 animals.
- 11500 No. of tree species were planted in NICRA village under natural resource management.
- Organised training on clean milk production for 52 dairy farmers and Animal Insurance training for 45 dairy farmers.
- Conducted on disease management in Arecanut (15 farmers) and Vegetable production in summer (16 farmers)
- Formed 8 income generating groups
- Organised exposure visit to KVK Bharamati, Ahmednagar, Rauri Agriculture University, Ralegaonsiddi in Maharashtra for CRMC members.

#### **INSIMP Activities:**

• Processing of minor millets and value addition.

Activities	Quantity (kg)	Amount (Rs.)
Ragi powder	196	7315-00
Ragi seeds processed, cleaned and sold	190	6650-00

## **SUMMARY FOR 2013-14**

## I. TECHNOLOGY ASSESSMENT

### Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management	-		
Varietal Evaluation	Groundnut	Performance assessment of Groundnut varieties for better yield	03
Integrated Pest Management			
Integrated Crop Management	Banana	Modified high density planting in Banana	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	Redgram	Management of pulse storage beetle though neem leaves and ginger power	05
Others (Pl. specify)			
-	1	Total	10

## Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management	Cattle	Alleviation of reproductive problem (uterine prolapse) in dairy animals through balanced nutrition	12
Production and Management			
Others (Pl. specify)			
Total			12

## Summary of technologies assessed under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

## Summary of technologies assessed under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

### II. TECHNOLOGY REFINEMENT

## Summary of technologies refined under various crops

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

## Summary of technologies assessed under refinement of various livestock

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

## Summary of technologies refined under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

## Summary of technologies refined under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

## III. FRONTLINE DEMONSTRATION

# Crops

Сгор	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Farmer (ha)		(q/ha)	/ha) % change in yield		Other parameters		nomics of (Rs./		tion	*Economics of check (Rs./ha)			
		demonstrated				Demons ration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Cereals																		
Rice	ICM	ICM in Rice with an emphasis on mechanization		20	08	55.17	49.55	11.34	No. of tillers/yield – 41.9	29.0	44300	82755	38455	1.86	49650	74325	24675	1.49
Rice	IDM	Integrated Management of sheath blight in Rice		05	02	52.9	43.3	22.17	Incidence of sheath blight – 6	30	45550	84640	39090	1.85	48800	69280	20480	1.41
Maize	ICM	ICM and intercropping in Redgram in Maize		15	06	53.15	41.5	28.02	Stem borer incidence – 5	30	34000	63756	29756	1.87	31000	49800	18800	1.60
Millets																		
Ragi	ICM	ICM in HYV Ragi		15	06	22.50  Fodder Yield – 3 tons	Fodder Yield – 2.5 tons	38	No. of fingers/head – 6.1	4.2	23000	54000	31000	2.34	24500	40100	15600	1.63
Oilseeds																		
Pulses																		
Redgram	IPDM	IPDM in Redgram		05	02	8.8	6.3	39.60	Pod borer incidence – 5	22	11500	28160	16660	2.44	12250	20160	7910	1.64
Vegetables																		
Tomato	ICM	ICM in tomato		08	03	672.2	578.4	16.21	Bacterial wilt – 6	18	49750	168047	118297	3.38	50250	144609	94359	2.88
Flowers																		
Ornamental																		
Fruit																		
Mango	INM	Foliar application of 'Mango Special in Mango for enhanced yield		02	01													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Mango (2012-13)	IPM	Integrated Management of Stem borer in Mango		05	100 Plamts	Rejuvination % Treated – 15	Rejuvination % Un Treated - 09											
Banana	ICM	ICM in Banana		12	04	204.4	154.14	32.6	Avg. bunch weight – 14.86	11.21	165000	654080	489080	3.96	192500	493248	300748	2.56
Fibres like Cotton																		
Cotton	IPM	Integrated management of sucking pests in Cotton		10	04	14.25	10.75	32.55	Incidence of sucking pest – 8	28	32250	68400	36150	2.12	34500	51600	17100	1.49
Spices and condiments																		
Commercial																		
Sugarcane (2012-13)	IPM	Integrated Management of early shoot borer		11	10	1455	1125	29.33	Early shoot borer incidence -5	26	145625	334650	189025	2.29	150375	258750	108375	1.72
Medicinal																		
and																		
aromatic																		
Fodder																		
Plantation	IDM	Integrated		05	02													
Arecanut	IDM	management of bacterial leaf stripe in young Arecanut plantation		03	02													
Arecanut	ICM	Promotion of green manure crop in Arecanut plantations		10	04												1	1
Coconut	ICM	Popularization of KDM-1 Drumstick as intercrop in Coconut gardens		08	03													
Fibre																		
		Total																-

# Livestock

Category	Thematic area	Name of the technology	No. of	No. of Farmer	No.of	Major par	rameters	% change in major parameter	Other par	rameter	*Econ	omics of de	nonstration	n (Rs.)		*Economic (R		
		demonstrated	KVKs	rarmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																		
	Nutritional deficiencies	Balanced nutrition and improved management practices in dairy animals for better performance		05	05	225		16.6			8100	43740	35640	5.4	7200	24300	17100	3.4
Poultry		•																
Rabbitry																,		
Pigerry																		
Sheep and goat																		
Duckery																		
		Total																

### **Fisheries**

Category	Thematic	Name of the technology	No. of KVKs	No. of Farmer	No.of units	Maj param		% change in major parameter	Other par	rameter	*Econo	mics of dem	onstration (	(Rs.)		*Economics (Rs		
	area	demonstrated	KVKS	raimei	umis	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common						Tation			Tation		Cost	Keturn	Keturn	BCK	Cost	Keturn	Keturn	DCK
carps		Polyculture of fishes in big earthern ponds (2013-14)		06	64000													
		Integrated Fish Farming (2012-13)		17	17 units	80	20	300			150000	800000	650000	5.33	50000	150000	100000	3.0
Mussels																		
Ornamental fishes																		
		Production of ornamental fishes in backyard for additional income (2012-13)		01	01	100 No./ batch					10000	15000	5000	1.5				
		Total														,	,	

# Other enterprises

Category	Name of the technology	No. of KVKs	No. of Farmer	No.of units	Major pai	rameters	% change in major parameter	Other par	rameter	*Econo	mics of de or Rs		n (Rs.)	•	Economic (Rs.) or		
	demonstrated	KVKS	rarmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster					ration			ration		Cost	1tetai ii	1tetal II	Den	Cost	Hetain	Heturn	Den
mushroom																	
Button																	
mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others																	
	Total							,									,

## Women empowerment

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

# Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of KVKs	Area (ha)	Filed observation (output/man hour)	% change in major parameter	Labor re (man	Cost	reduction (Rs./l Rs./Unit etc.)	na or
					Demons Check ration					

# Other enterprises

## **Demonstration details on crop hybrids**

	Name of the	N. C	Area	Yield (kg/ha) / n	najor par	ameter		Economics	(Rs./ha)	
Crop	Hybrid	No. of farmers	(ha)	Demonstration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11
Cereals										
Bajra										
Maize	NAH-1137	15	6	5315	4150	2802	34000/-	63756/-	29756/-	1.87
Rice										
Sorghum										
Wheat										
Others										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Total										

1	2	3	4	5	6	7	8	9	10	11
Vegetable crops										
Bottle gourd										
Capsicum										
Others										
Total										
Cucumber										
Tomato	Arka Rakshak	08	03	67220	57840	16210	49750/-	168047/-	84688/-	3.38
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others										
Total										
Commercial crops										
Sugarcane										
Coconut										
Cotton	Menaka	10	04	1425	1075	3255	32250/-	68400/-	36150/-	2.12
Total										
Fodder crops										
Maize (Fodder)										
Sorghum (Fodder)										
Others										
Total										

# **IV.** Training Programme

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

No. of		No. of Participants									
Courses		General			SC/ST			Grand Total			
	Male	Female	Total	Male	Female	Total	Male	Female	Total		
2	3	4	5	6	7	8	9	10	11		
01	28		28	02		02	30		30		
02	33	07	40	01		01	34	07	41		
06	119	46	165	44	31	75	163	77	240		
	02	01 28	2     3     4       01     28        02     33     07	2       3       4       5         01       28        28         02       33       07       40	2       3       4       5       6         01       28        28       02         02       33       07       40       01	2       3       4       5       6       7         01       28        28       02          02       33       07       40       01	2       3       4       5       6       7       8         01       28        28       02        02         02       33       07       40       01        01	2       3       4       5       6       7       8       9         01       28        28       02        02       30         02       33       07       40       01        01       34	2       3       4       5       6       7       8       9       10         01       28        28       02        02       30          02       33       07       40       01        01       34       07		

1	2	3	4	5	6	7	8	9	10	11
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others a)Kitchen garden and terrace gardening	04	23	247	270		50	50	23	297	320
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										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others										
d) Plantation crops										
Production and Management technology	02	18		18	07		07	25		25
Processing and value addition										
Others										
e) Tuber crops										
Production and Management technology										
Processing and value addition										

1	2	3	4	5	6	7	8	9	10	11
Others										
f) Spices										
Production and Management technology										
Processing and value addition										
Others										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others										
<b>Livestock Production and Management</b>										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	01	16	12	28				16	12	28

1	2	3	4	5	6	7	8	9	10	11
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others: a) Preparation of vermicompost	01		36	36		03	03		39	39
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										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others										
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										

1	2	3	4	5	6	7	8	9	10	11
Plant Protection										
Integrated Pest Management										
Integrated Disease Management	01	07		07				07		07
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others a) Apiculture	01	47	10	57	04		04	51	10	61
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										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
	· · · · · · · · · · · · · · · · · · ·									

1	2	3	4	5	6	7	8	9	10	11
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										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	19	291	358	649	58	84	142	349	442	791

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

	No. of				No	of Partici	pants			
Area of training	Courses		General			SC/ST	1		<b>Grand Tot</b>	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Chara Dan Arastan	2	3	4	5	6	7	8	9	10	11
Crop Production										
Weed Management	01	15		15				15		15
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil and Water Conservation	01	13	20	33	02		02	15	20	35
Integrated Nutrient Management										
Production of organic inputs										
Others a) seed treatment	03	37	02	39	07		07	44	02	46
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	01	14		14	02		02	16		16
Off-season vegetables										
Nursery raising	01	16		16	01		01	17		17
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										

1	2	3	4	5	6	7	8	9	10	11
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	01	10	02	12				10	02	12
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others: a) Integrated nutrient management in banana	01	08		08				08		08
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others										
d) Plantation crops										
Production and Management technology	01	10		10	02		02	12		12
Processing and value addition	01	27		27				27		27
Others										
c) Intercropping in coconut and arecanut	02	35		35	01		01	36		36
d) Green manuring	01	10		10	05		05	15		15
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others										

1	2	3	4	5	6	7	8	9	10	11
f) Spices										
Production and Management technology	01	16	05	21	12	02	14	28	07	35
Processing and value addition										
Others										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management	03	11	01	12	14	02	16	25	03	28
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	01	04		04	10	01	11	14	01	15
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others										
Livestock Production and Management										
Dairy Management	03	43	30	73	08	01	09	51	31	82
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										

1	2	3	4	5	6	7	8	9	10	11
Feed and Fodder technology										
Production of quality animal products										
Others										
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										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others										
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										
Plant Protection										

1	2	3	4	5	6	7	8	9	10	11
Integrated Pest Management	03	28		28	09		09	37		37
Integrated Disease Management	02	28		28	02		02	30		30
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others										
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										
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										

1	2	3	4	5	6	7	8	9	10	11
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										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	27	325	60	385	75	6	81	400	66	466

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			Grand Tota	
1	2	Male 3	Female 4	Total 5	Male	Female 7	Total 8	Male 9	Female 10	Total 11
Nursery Management of Horticulture crops	2	3	4	3	6	1	ð	9	10	11
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs	01	08	08	16	05	09	14	13	17	30
Planting material production										
Vermi-culture	01	05	16	21	02	07	09	07	23	30
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										

1	2	3	4	5	6	7	8	9	10	11
Rabbit farming										
Poultry production										
Ornamental fisheries	01	15	12	27	02		02	17	12	29
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Others.										
a) Preparation for UAS and UAHS practical exams	02	21	12	33				21	12	33
b) Production of horticulture crop	03	05	45	50		06	06	05	51	56
c) Vermicompost production	04	24	09	33	03	06	09	27	15	42
d) Weed management	01	06	03	09	02		02	08	05	13
e) Attracting rural youth towards agriculture	02	16	15	31	11	05	16	27	20	47
f) Coconut climbing and plant protection	07	106		106	34		34	140		140
g) Bio-pesticides	01		04	04		04	04		08	08
TOTAL	23	206	124	330	59	37	96	265	163	428

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

	N. C				No	. of Participa	nts			
Area of training	No. of Courses		General			SC/ST			<b>Grand Total</b>	
	Courses	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										
TOTAL										

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			Grand Tota	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	02	50		50	17		17	67		67
Integrated Pest Management	01	13	03	16	03		03	16		16
Integrated Nutrient management	01	10		10	02		02	12		12
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	01	43		43	03		03	46	00	46
Livestock feed and fodder production										
Household food security										
Any other	01	24		24	18		18	42		42
a) production technology of maize and rice										
b) production technology of horticulture crops	01	29	03	32	11		11	40	03	43
c) Biofuel training to gram panchayath officials and elected members	27	418	167	585	273	126	399	525	293	818
d ) ICM in plantation crop	01	25	-	25	04	01	05	29	01	30
e) Inland aquaculture	01	22	03	25	04		04	26	03	29
Total	36	634	176	810	335	127	462	803	300	1103

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

	No. of				No.	of Particip	ants			
Area of training	Courses		General			SC/ST			<b>Grand Tota</b>	al
	Courses	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 a) Integrated farming system	01	18	03	21	08		08	26	03	29
Total	01	18	03	21	08		08	26	03	29

## **Sponsored training programmes**

		No. of	No. of Participants								
S.No.	Area of training	Courses		General			SC/ST		G	rand Tot	al
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12
1	Crop production and management										
1.a.	Increasing production and productivity of crops	01	16		16	04		04	20		20
1.b.	Commercial production of vegetables	04	23	247	270		50	50	23	297	320
2	Production and value addition										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	Soil health and fertility management										
4	Production of Inputs at site										
5	Methods of protective cultivation										
6	Others:										
	a) Apiculture	01	47	10	57	04		04	51	10	61
	b) Biofuel training to gram panchayath officials and elected members	27	418	167	585	273	126	399	525	293	818
	c) Coconut climbing and plant protection	07	106		106	34		34	140		140
7	Post harvest technology and value addition										
7.a.	Processing and value addition										
7.b.	Others										
8	Farm machinery										
8.a.	Farm machinery, tools and implements										
8.b.	Others										
9.	Livestock and fisheries										
10	Livestock production and management										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management	01	43		43	03		03	46		46
10.c	Fisheries Nutrition										
10.d	Fisheries Management	01	45	02	47	12	01	13	57	03	60
10.e.	Others										
11.	Home Science										
11.a.	Household nutritional security										

1	2	3	4	5	6	7	8	9	10	11	12
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others										
12	Agricultural Extension										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others										
	Total	42	698	426	1124	330	177	507	862	603	1465

# **Details of Vocational Training Programmes carried out for rural youth**

		No. of	No. of Participants									
S.No.	Area of training	Courses		General			SC/ST			Grand Tota	ıl	
		Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	2	3	4	5	6	7	8	9	10	11	12	
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											
2	Post harvest technology and value addition											
2.a.	Value addition											
2.b.	Others											
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											
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.											

1	2	3	4	5	6	7	8	9	10	11	12
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others: Coconut climbing and plant protection	07	106	1	106	34		34	140		140
5	Agricultural Extension										
5.a.	Capacity building and group dynamics										
5.b.	Others										
	Grand Total	07	106		106	34		34	140		140

V. Extension Programmes

## **Extension Programmes (including extension activities undertaken in FLD programmes)**

Nature of Extension Programme	No. of Programmes	No. of Farmers	No. of Extension Personnel	Total
1	2	3	4	5
Field Day	09	311	21	332
Kisan Mela	03			
Kisan Ghosthi				
Exhibition	06	2228	359	2587
Film Show	34	1303	202	1505
Method Demonstrations	04	66	2	68
Farmers Seminar	03	121		121
Workshop	02	317		317
Group meetings	03	42		42
Lectures delivered as resource	52	1634	146	1780
persons				
Newspaper coverage	75			
Radio talks	08			
TV talks	18			
Popular articles	12			
Extension Literature	66	2033	1135	3168
Advisory Services	1648	1771	60	1831
Scientific visit to farmers field	108	378	19	397
Farmers visit to KVK	08	560	16	576
Diagnostic visits	43	165	22	187
Exposure visits	03	70	1	71
Ex-trainees Sammelan	01	70		70
Soil health Camp				
Agri mobile clinic				
Soil test campaigns	01	24		24
Farm Science Club Conveners meet				

1	2	3	4	5
Self Help Group Conveners				
meetings				
Mahila Mandals Conveners				
meetings				
Celebration of important days				
World Kitchen Garden Day	01		30	30
Parthenium Awareness Week	01		16	16
World Food Day	01		41	41
Women in Agriculture Day	01	29		29
Kissan Samman Divas	01	73		73
National Science Day	01	114		114
International Womens Day	01	36		36
World Water Day	01	23		23
National Fish Farmers Day	01	101	7	108
Others				
Farm Innovators Meet	01	34		34
Bi-Monthly workshop	05		210	210
DDFA meeting	08	184		184
Farmers-Scientist Interactive	04	140	3	143
programme				
Pest Survey	03		8	8
Agriculture Technology Week	01	678	61	739
PRA	05	245	2	247
Publications	16			
Total	2153	10671	2361	13032

## **Details of other extension programmes**

Particulars	Number
Electronic Media	01
Extension Literature	16
News Letter	04
News paper coverage	75
Technical Articles	10
Technical Bulletins	
Technical Reports	
Radio Talks	08
TV Talks	18
Animal health amps (Number of animals treated)	02 (293 animals treated)
Total	

### VI. PRODUCTION OF SEED/PLANTING MATERIAL

## Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals					
Oilseeds					
Pulses					
Commercial crops					
Vegetables	Drumstick	PKM-1	0.04	920-00	04
Flower crops					
Spices					
Fodder crop seeds	Grass	Guinea	0.2805	2935-00	20
Fiber crops					
Forest Species					
Green manure	Sunhemp		0.25	1750-00	05
Total			0.5705	5605-00	29

### Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Number	Value (Rs.)	Number of farmers
1	2	3	5	6	7
Commercial					
Vegetable seedlings	Drumstick	PKM-1	3579	34010-00	42
	Curry leafs	Suhasini	500	5000-00	18
Fruits	Sapota	Kalipatti	60	1800-00	04
	Lemon	Local	510	5050-00	38
Ornamental plants					
Medicinal and Aromatic					
Plantation	Mango	Alphanso	1085	33630-00	36
Spices					
Tuber					

1	2	3	5	6	7
Fodder crop saplings	Fodder slips	Susbania, Subabul	11590	7490-00	35
	Azolla	Azolla pinnata	0.645 q	1290-00	40
Forest Species					
Others					
Total			17324.645	88300-00	213

#### **Production of Bio-Products**

Bio Products	Name of the bio-product	Quantity (Kg)	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide	Trichoderma	81	7225-00	17
Bio Agents				
Others	Vermicompost	13800	69000-00	126
	Earthworms	73.05	18375-00	45
	Banana Special	3660	549000-00	550
Total		17614.05	643600-00	738

# Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers
1	2	3	4	5
Dairy animals				
Cows				
Buffaloes				
Calves	HFx	03	2000-00	
Others				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others				
Piggery				
Piglet				
Others				
Fisheries				
Fingerlings				
Ornamental fishes	Guppies, Mollies, Sword tails	1127	5940-00	
Total				

#### VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2013-14

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	504	385	153	27031/-
Water	311	203	97	13250/-
Plant				
Manure	05	03	02	500/-
Total	820	591	252	40781/-

#### VIII. SCIENTIFIC ADVISORY COMMITTEE

**Number of SACs conducted - 01** 

#### IX. NEWSLETTER

Number of issues of newsletter published - 04 issues (2000 Copies)

#### X. RESEARCH PAPER PUBLISHED

Number of research paper published - 01

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

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

