# **ANNUAL REPORT 2010-11**

(APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA (HAVERI)

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# PART I - GENERAL INFORMATION ABOUT THE KVK (APRIL 2010 TO MARCH 2011)

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

T77777 A 11	Telephone			***	
KVK Address	Office	Fax	E mail	Web Address	
Krishi Vigyan Kendra,	08373-	08373-	kvk_haveri@rediffmail.com	www.kvkhaveri.org	
Hanumanamatti-581135	253524	253524			
Tq: Ranebennur, Dist: Haveri					
State : Karnataka					

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

Address	Tele	phone	E moil	Web Address	
Address	Office	Fax	E mail	web Address	
University of Agricultural Sciences,	0836-	0836-	vc_uasd@rediffmail.com	www.uasd.edu	
Yattinaguda campus, Krishinagar,	2447783	2745276			
Dharwad-580005					

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

None	Telephone / Contact			
Name	Residence	Mobile	Email	
Dr. M.V. Nagaraja	-	9448495338	mvnagaraja2007@rediffmail.com	

1.4. Year of sanction: 1977

# 1.5. Staff Position (as 31st March 2011)

Sl. No	Sanctioned post	Name of the incumbent	Designatio n	M /F	Discipline	Highest Qualific ation	Pay Scale +AGP	Basic pay	Date of joining KVK	Perma nent /Temp orary	Catego ry
1	Programme Coordinator	M.V. Nagaraja	PC	M	Ag. Extn. Edu.	Ph.D	37400-61000 + 9000	49180	01.08.07	Perman ent	Others
2	SMS	K.B. Yadahalli	SMS	M	Plant Pathology	Ph.D	37400-61000 + 9000	40240	03.10.03	Perman ent	OBC
3	SMS	B.C. H. Swamy	SMS	M	Ag. Entomology	Ph.D	15600-39100 + 6000	20600	03.03.06	Perman ent	OBC
4	SMS	T.M. Soumya	SMS	F	Agronomy	Ph.D	15600-39100 +6000	18330	05.12.08	Perman ent	OBC
5	SMS	Geeta Kalakanavar	SMS	F	Home Science	M.Sc.	15600- 39100+6000	16250	01.07.09	Perman ent	OBC
6	SMS	S.Y. Mukartal	SMS	M	Animal Science	M.V.Sc.	15600-39100 + 6000	15600	06.07.09	Perman ent	others
7	SMS					Vaca	ınt				
8	Prog.Asst.( Lab Tech.)/ T-4	M.A.Gaddana keri	Prog. Asst.	M	Soil Science	M.Sc.	5500-9000	5850	26.02.09	Perman ent	OBC
9	Prog. Asst. (Comp.)/ T-4	Rekha K.N.	Prog. Asstt.	F	Computer Science	M.Sc.	5500-9000	5850	12.11.09	Perman ent	OBC
10	Prog. Asst./ Farm Manager	Sairabanu Muganur	Prog. Asstt	F	Farm Manager	B.Sc.	5500-9000	5500	02.07.09	Perman ent	OBC
11	Assistant	V.S. Kalakai	Supt. (General)	M	Supt. (General)	-	10800-2500	14400	07.01.09	Perman ent	others
12	Jr.Stenographer	Saroja Talawar	Typist	F	Typist	-	8000-14800	8200	07.11.09	Perman ent	ST
13	Driver	Mahesh L.M.	Driver	M	Driver	-	5800-10500	6250	12.07.06	Perman ent	Others
14	Driver	P.C. Kunbevin	Driver	M	Driver	-	5800-10500	10000	07.06.98	Perman ent	OBC
15	Supporting staff	K.B. Belakeri	Supporting staff	M	Supporting staff	-	5200-8200	6950	02.11.98	Perman ent	OBC
16	Supporting staff	C. V. Nelogal	Supporting staff	M	Supporting staff	-	5200-8200	6950	01.07.02	Perman ent	Others

# 1.6. Total land with KVK (in ha)

S. No.	Item	Area (ha)
1	Under Buildings	2.2
2.	Under Demonstration Units	0.0
3.	Under Crops	17.7
4.	Orchard/Agro-forestry	0.1
5.	Others	-

: 20 ha

# 1.7. Infrastructural Development:

# A) Buildings

			Stage					
S.				Complet	Incomplete			
No	Name of building	Source of funding	Comple tion Date	Plinth area (Sq.m)	Expenditur e (Rs.)	Start ing Date	Plinth area (Sq.m)	Status of construc tion
1.	Administrative Building	ICAR	1999	400	27.93	-	-	-
2.	Farmers Hostel	ICAR	2004	305	22.63	-	-	-
3.	Staff Quarters (6 Nos.)	ICAR	2007	399	39.68	-	-	-
4.	Rain Water harvesting system	ICAR	2009		9.98	-	-	-

#### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tempo trax Judo	2002	4.50	201240	Major repair
Motor cycle Bajaj CT-100	2005	0.40	18132	Good
Tractor and Trailer New Holland Ford 3230	2005	5.00	2730.3 hr	Good
Motor cycle Bajaj CT-100	2006	0.40	13238	Good

## C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Spectrophotometer	31.03.2005	40,050	Good
Flame photometer	31.03.2005	32,040	Good
pH meter	31.03.2005	8,900 (850)	Good
Conductivity bridge	31.03.2005	9,790(1000)	Good
Physical balance	31.03.2005	10,890	Good
Chemical balance	31.03.2005	57,000	Good
Water distillation still	31.03.2005	62,444	Good
Kjeldahl digestion and distillation (2 sets)	31.032005	1,42,844	Good
Shaker	31.03.2005	47,025	Good
Refrigerator	31.03.2005	12,285	Good
Oven	31.03.2005	17,228	Good
Hot plate	31.03.2005	3,046	Good

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Grinder	31.03.2005	15,635	Good
Fax machine	18.03.2004	24,900	Good
Xerox machine	30.11.2004	52,000	Good
HP Computer with accessories	11.11.2006	39,216	Good
Multi media projector (LCD)	16.12.2006	58,488	Good
Power weeder	31.03.2008	36,220	Good
Mist blower	31.03.2008	35,110	Good
Toshiba E-Studio Xerox	3.06.2008	55,120	Good
Laser printer	20.08.2008	15043	Good
LCD Motorized screen	20.08.2008	27,000	Good
Toshiba E-Studio Xerox	24.12.2008	55,120	Good
Computer with accessories			
HP printer	29.01.09	300000	Good
Scanner	29.01.09	300000	Good
Server with accessories			

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

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken		
1.	11.06.2010	21	09	Technology week should be conducted both in Kharif and Rabi/summer at KVK farm  Each FLD and OFT should be conducted at KVK farm.  Maintenance of horticulture nursery to produce quality seedlings at reasonable price. If it is inconvenient need based seedlings should be supplied from other KVK's and UAS, Dharwad  Value addition to banana fiber  Organic farming and integrated farming system demonstration units at KVK farm.	Technology week conducted at KVK farm during Kharif (July).  Demonstrations were conducted at KVK farm.  Seedlings of Sapota: DSH-1 & DSH-2 (562), Curry: Suwasani (561), Pomogranate (02) and Tamarind (25) were produced and sold to the farmers @ Rs. 50, 05,20 and 20 respectively  Communication under progress with the resource person  Organic farming and integrated farming system components such as green manure (sunhemp, diancha, glyricidia) and horticulture (sapota, lime, curry leaf, chakramuni, mango, guava) crops are planted in an area of one acre at KVK farm.  Dr. Usha Malagi, Prof. of Food and Nutrition has been nominated as resource person by UAS, Dharwad. Training programmes are under progress in		
2.	21.03.2011	13	17	<ul> <li>Mechanization of paddy cultivation to be demonstrated on farmers field by using paddy trans planter on hire basis.</li> <li>Net core service facility to be utilized to send the agricultural information daily to the farmers through SMS.</li> <li>Map to be displayed on soil fertility status of the district and of KVK farm based on the soil test report.</li> <li>Demonstration and popularization of Co-4 fodder crop.</li> <li>Value addition to minor millets and increase in income of self help group</li> </ul>			

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

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

S. No	Farming system/enterprise
1	Maize, Cotton, Minor millets, Sorghum, Groundnut, Sunflower, Soybean, Greengram, Horticulture
	crops , Animal husbandry, Integrated farming system, Agri-silivi-horti-pasture etc.,

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

S. No	Agro-climatic Zone	Characteristics
		• Total geographical area is 4.85 lakh ha. Cultivated area is 3.86 lakh
	Northern Transitional zone (Zone-8) & Hilly zone (Zone 9)	ha. of which 72,000 ha is irrigated (13.5%).
		• Receives on an average 702 mm of rainfall annually mainly during
1.		June to October. The rainfall is received in two peaks (July &
		September).
		$\bullet$ Land holding pattern of the district is < 1 ha (32,719), 1-2 ha
		(60,095), 2-4 ha $(48,885)$ , 2-10 ha $(19,613)$ and $> 10$ ha $(2,649)$ .

# 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Red soil	Sandy soil with high infiltration rate	2.53 lakh
2	Black soil	Medium to deep black soil	1.33 lakh

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

S. No	Crop	Area (ha) Production (Metric		Productivity (kg /ha)
			tons)	
1	Maize	138575	480924	3470
2	Rice	39250	126710	3230
3	Jowar	43579	600052	1380
4	Minor millets	2800	1379	4900
5	Cotton	114152	64582	5700
6	Sunflower	16850	10725	6400
7	Groundnut	29000	41987	1450
8	Soybean	9550	13612	1430
9	Bengalgram	7500	5781	7700

Source: JDA, Haveri

#### 2.5. Weather data

Month	Rainfall (mm)	Tempera	ture <sup>0</sup> C	Relative Humidity (%)
William	Kaiman (min)	Maximum Minimum		Relative Humanty (70)
April -10	50.40	36.65	22.66	55.12
May-10	21.08	35.40	23.63	65.11
June-10	134.06	30.20	22.34	75.08
July-10	173.06	27.90	20.81	84.89
August-10	194.80	28.15	20.85	82.14
September-10	117.80	28.95	21.24	81.30
October-10	161.60	30.40	21.00	78.32
November-10	117.00	28.92	19.66	77.02
December-10	2.00	28.60	15.10	71.27
January-11	0	30.75	12.70	49.13
February-11	6.2	34.87	32.04	45.00
March-11	-	36.50	33.58	40.50

Source: JDA, Haveri

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

Category	Population	Production	Productivity
Cattle			1
Crossbred	56747	24000 tones	5.63 kg milk
Indigenous	235402	26000 tones	2.1 kg milk
Buffalo	113847	32000 tones	Meat 95 kg/animal
			2.5 kg /animal/day
Sheep			1
Crossbred	282	287 tones	Meat 14.63 kg/animal
Indigenous	317902		
Goats	150650	158 tones	Meat 14.24 kg/animal
Pigs			Meat 62.5 kg/animal
Crossbred	-	-	
Indigenous	6827	2 tones	
Rabbits	250		
Poultry			
Hens	698296	Eggs 436 lakh	Egg 238 /bird/year
		Meat 247 tones	Egg 97 /Desi bird/year
Category	Area	Production	Productivity
Fish	5605 ha WSA	6581.6 metric tone/	1.6 metric tone/ha
		4000ha	

Source: 18<sup>th</sup> Live stock censes, Department of Animal Husbandry, district Haveri

## 2.7 District profile has been prepared and submitted: Yes

# ${\bf 2.8\ Details\ of\ Operational\ area\ /\ Villages}$

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
					Maize	Turcicum leaf blight Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition techniques.
					Cotton	Leaf reddening, bad boll opening in cotton	Integrated crop management technology
			TT 1001		Sunflower	Necrosis, Hairy caterpillar	Integrated Pest & disease management.
			Hosaritti Katenhalli Kurubhagound		Groundnut	Low yield & improper water management	Production technology & BBF methods.
			Halagi Kancharagatti		Minor millets	Poor Nutrient management & use of local varieties	Introduction of new varieties & Nutrient Management
1	Haveri	Haveri Karjagi Guttal	Basapur Havanur Marol	2007-08 to 2008-09	Chilli	Powdery mildew Dieback, Fruit borer & Murda complex.	IPM in chilli
			Kanavalli Devigiri		Onion	Low yield, purple blotch & Poor Nutrient management	INM & Management of purple blotch.
			Aaladakatti Tevaramalalli		Tomato	Fruit borer & Alternaria Leaf blight	Management of fruit borer & Alternaria Leaf blight.
					Brinjal	Brinjal shoot and fruit borer	Integrated management of shoot and fruit borer
					Banana	Rhizome weevil, panama wilt & bunchy top	Integrated pest management
					Sheep rearing, Dairying & Poultry	FMD, poor nutritional management of live stock, scarcity of fodder	Scientific dairy farming , poultry management, Sheep management & cultivation & enrichment of fodder.
				2008-09 to 2009-10	Groundnut	Low yield & improper water management	INM in Oil seeds
					Greengram	Shattering of pods & Powdery mildew	Introduction of non shattering variety & Management of Powdery mildew
			Madpur		Minor millets	Poor Nutrient management & use of local varieties.	Introduction of new varieties & Nutrient Management
2	Savanur	Hattimattur Savanur	Baradur K.Mallapur Nadihalli		Flowers	Alternaria leaf blight of Chrysanthemum & damping off diseases	Integrated disease management & use of GR.
	Sa	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Hurallikupi Tevaramalalli		Soybean	Leaf eating Caterpillar & rust.	Integrated management of pest & Diseases.
			Hosaneralagi		Maize	Turcicum leaf blight Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition techniques
					Cotton	Leaf reddening and bad boll opening	ICM technology
					Maize	Turcicum leaf blight Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition techniques
	3 Shiggaon Dundasi Bankapura		Chikkamalur Banikoppa Surupagatti		Cotton	Leaf reddening and bad boll opening	ICM technology
3		Dundasi	Hirebendigeri Belagali	2008-09 to	Tomato	Fruit borer & Alternaria blight.	Management of fruit borer & Alternaria blight.
		Bankapura	Basanal Hattigeri	2009-10	Cowpea	Poor nutrient management	Production technology.
			Bhadrapur		Minor millets	Poor Nutrient management & use of local varieties	Introduction of new varieties & Nutrient Management
					Soybean	Spodoptera & other Leaf eating Caterpillars.	Management of Leaf eating Caterpillar

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
				N/N	Greengarm	Stem fly,Powdery mildew & Shattering	Management of Greengram stem fly Use of non shattering HYV & IDM.
					Redgram	Pod borer & wilt	Management of Pod borer & Fusarium wilt.
					Groundnut	Leaf spot and rust	Production technology & BBF
					Value addition	Non utilization of minor millets	Value addition to minor millets
					Maize	Turcicum leaf blight, Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition techniques
					Cotton	Leaf reddening, bad boll & opening	ICM technology
			Tiluvalli		Mango	Fruit fly & Dieback.	Integrated pest & disease management
4	Hangal	Hangal Bommanahal li	Savekeri Sheragula	2009-10 to	Banana	Rhizome weevil, panama wilt & bunchy top	Integrated pest & disease management
	H	Akkialur	Balehalli	2010-11	Greengarm	Stem fly, Powdery mildew & Shattering	Management of Greengram stem fly Use of non shattering HYV & IDM.
					Soybean	Leaf eating Caterpillar & rust.	Management of pest & diseases.
					Redgram	Pod borer & Wilt	Management of Pod borer & Fusarium wilt.
					IG activities	Un employment during off season	IG activities
					Maize	Turcicum leaf blight, Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition Techniques
					Cotton	Leaf reddening, bad boll opening	ICM technology
					Sunflower	Necrosis, Hairy Caterpillar	Management of Hairy Caterpillar
					Groundnut	Low yield & improper water management	Production technology & BBF.
			Kakol Makanur		Minor millets	Poor Nutrient management & use of local varieties	Introduction of new varieties & Nutrient Management
5	Ranebennu	Ranebennur Kun Medleri Ita Kuppelur Benka	Kamdod Kunbevu Itagi Benkankodda Aladakatti	2009-10 to 2010-11	Chilli	Powdery mildew, Dieback, Fruit borer & Murda complex.	Management of Powdery Mildew of Chilli INM, Management of murda complex, fruit borer & Dieback.
			Aremallapur		Onion	Purple blotch, Twisting and Crinkling & Onion thrips	INM, Management of purple blotch & Twisting and Crinkling in onion.
					Brinjal	Brinjal shoot and fruit borer	Integrated management shoot and fruit borer
				Banana	Rhizome weevil, panama wilt & bunchy top	Integrated pest management	
					Sheep rearing, Dairying & Poultry	FMD, poor nutritional management of live stock, scarcity of fodder	Scientific dairy farming , poultry management, Sheep management & cultivation & enrichment of fodder.
					Drudgery reduction	Less labour availability, drudgery prone activities	Drudgery reducing technology

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
					Maize	Turcicum leaf blight Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition techniques
					Cotton	Leaf reddening, bad boll opening	ICM technology
					Sunflower	Necrosis, Hairy Caterpillar	Management Hairy Caterpillar
			Hireannaji		Groundnut	Low yield & improper water management	Production technology & BBF.
	lgi	Byadgi	Bisalahalli Chinikatto Kurudukodihall	2008-09	Greengarm	Stem fly , Powdery mildew & Shattering	Management of Greengram stem fly Use of non shattering HYV & IDM.
6	Byadgi	Kaginele	Katenahalli Timapur	to 2009-10	Redgram	Pod borer & wilt	Management of Pod borer & Fusarium wilt
		Shidenur Kadaramadalagi	Shidenur Kadaramadalagi		Onion	Low yield, purple blotch & Poor Nutrient management	INM & Management of purple blotch.
			Belekeri		Tomato	Fruit borer & Alternaria blight	Management fruit borer & Alternaria blight
				Brinjal	Brinjal shoot and fruit borer	Integrated management of shoot and fruit borer	
					Value addition	Non utilization of minor millets	Value addition to minor millets
					Sheep rearing, Dairying & Poultry	FMD, poor nutritional management of live stock, scarcity of fodder	Scientific dairy farming , poultry management, Sheep management & cultivation & enrichment of fodder.
					Maize	Turcicum leaf blight, Low yield, poor nutrient management	Management of Turcicum leaf blight of Maize Production technology & Value addition techniques
			Hirebudihal		Cotton	Leaf reddening, bad boll opening	ICM technology
			Kunchur Dudihalli		Sunflower	Necrosis, Hairy Caterpillar	Management of Hairy Caterpillar.
_	erur	Hirekerur	Nolageri Harikatti	2009-10	Groundnut	Low yield & improper water management	Production technology & BBF.
7		Rattihalli Hansabhavi	Somanahalli Chikkamathur	to 2010-11	Redgram	Pod borer & wilt.	Management of Pod borer & Fusarium wilt.
			Koda Chinnahalli Kudapalli		Finger millets	Stem borer & neck blast	Introduction of resistant variety & Stem borer management
					Brinjal	Brinjal shoot and fruit borer	Integrated management of shoot and fruit borer
					Tomato	Fruit borer & Alternaria blight	Management of fruit borer & Alternaria blight
					Drudgery reduction	Less labour availability , drudgery prone activities	Drudgery reducing techonology

# 2.9 Priority thrust areas

S. No	Thrust area
1.	Water management (Irrigation and drainage) in groundnut
2.	Cropping geometry in Maize
3.	ICM practices for pulses and oil seeds
4.	Mirid bug in Cotton
5.	Spodoptera / Hairy caterpillar incidence in groundnut, soybean and green gram
6.	Pod weevil in green gram
7.	Brinjal shoot and fruit borer
8.	Nutrient and pest management in chilli
9.	Nutrient management in sapota, mango and papaya
10.	Post harvest technology and disease management in onion
11.	IG activities
12.	Value addition to minor millets
13.	Drudgery reducing technologies
14.	Bacterial wilt in brinjal and chilli
15.	Necrosis in sunflower and groundnut
16.	Turcicum leaf blight in maize
17.	Nutritional management of dairy animals
18.	Management of diseases in sheep/ dairy/ poultry
19.	Feed and fodder

# PART III - TECHNICAL ACHIEVEMENTS

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

	0	FT		FLD			
	,	1			2	2	
Numb	Number of OFTs Number of farmers		Numb	er of FLDs	Number of farmers		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
1.1	08	40	30	20	19	177	171

	Trai	ning		Extension Programmes			
	3	3		4			
Number of Courses Number of Participants		Number	of Programmes	Number of participants			
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
236	155	7080	5865	2252	1929	6756	9958

Seed P	roduction (Qtl.)	Planting materials (Nos.)				
	5	6				
Target	Target Achievement		Achievement			
25	50.66	5500	1350			

Livestock, poultry stra	ins and fingerlings (No.)	Bio-pr	oducts (Kg)
	7		8
Target	Achievement	Target	Achievement
=	-	10,000	5000

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

							Inte	erventions						
s.		Crop/	Identified			Number	Number	Number of	Extension	Supply	Supply of	Supply of	Supp	ly of bio
No	Thrust area	Enterprise	Problem	Title of OFT	Title of FLD	of	of	Training	activities	of seeds	Equipments	livestock		ducts
						Training (farmers)	Training (Youths)	(extension personnel)	(No.)	(Qtl.)	(No.)	(No.)	No.	Kg
1.	Increase in productivity	Groundnut	Low yield in local varieties	Evaluation of groundnut varieties	-	01	00	00	00	1.8	00	00	00	00
2.	Increase in productivity	Soybean	Low yield in local varieties	Evaluation of soybean varieties	-	01	00	00	00	2.10	00	00	00	00
3.	INM	Maize	Micro nutrient deficiency & low yield	Micronutrient management in Maize	-	01	00	00	00	0.12	00	00	00	00
4.	INM	Soybean	Low yield due to micronutrient deficiency	Micronutrient management in soybean	-	01	00	00	00	2.10	00	00	00	00
5.	Increase in productivity	Maize	Low yield	Evaluation of maize hybrid	-	01	00	00	00	0.60	00	00	00	00
6.	IPM	Groundnut (Kharif)	Incidence of defoliating insect Spodoptera	Management of Spodoptera in groundnut	-	01	00	00	00	00	00	00	2	5 lit
7.	Animal nutrition	Dairy	Infertility	Infertility management through nutrition	-	01	00	00	00	00	00	10 kg miniral mixture	00	00
8.	ICM	Little millet	Low yield	-	ICM in Little millet variety Sukshema	03	00	00	01	0.24	00	00	00	00
9.	ICM	Foxtail millet	Low yield	-	ICM in Foxtail millet variety HMT-100-1	02	00	00	00	0.42	00	00	00	00
10.	INM	Maize	Micronutrient deficiency	-	Varietal demonstration of Arjun and soil application of FeSO <sub>4</sub> + ZnSO <sub>4</sub> @ 25 kg /ha with 50 kg vermicompost / ha as basal dose	01	00	00	00	0.42	00	00	00	00
11.	ICM	Chilli	Low yield	-	Popularization of purified Byadagi Kaddi / Dabbi Chilli variety	06	00	00	00	0.10	00	00	00	00
12.	Feed & fodder	Dairy	Low milk yield	-	Use of Azolla and enriched dry fodder in animal feed	14	00	00	00	00	00	05 kg Azolla culture	00	00
13.	Livestock Management	Sheep	High ecto-parasite infestation in sheep	-	Treatment of ecto- parasites in sheep	02	00	00	00	00	00	05 injection	00	00
14.	Value addition	Baryard millet	Lack of knowledge	-	Popularization of barnyard millet	02	00	01	01	00	00	00	00	00
15.	Drudger reduction	Envirofit chula	Lack of knowledge	-	Use of Envirofit chula	01	00	01	00	00	08	00	00	00
16.	Drudger reduction	Serrated sickle	Drudgery prone & time consuming	-	Serrated sickle for harvesting of sorghum	01	00	01	00	00	20	00	00	00
17.	Drudger	Groundnut	Low efficiency	-	Groundnut decorticator	01	00	01	00	00	03	00	00	00

							Inte	erventions						
S. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT	Title of FLD	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of Equipments (No.)	Supply of livestock (No.)		ly of bio ducts Kg
	reduction	decorticator				, , ,	, , , ,	•						
18.	ICM	Groundnut	Nutrient deficiency, high pest and disease incidence	-	Integrated crop management in Groundnut (GPBD-4)	01	00	00	01	2.60	00	00	02	1.75
19.	ICM	Sunflower	Low yield	-	ICM in Sunflower (KBSH-53)	01	00	00	00	0.24	00	00	00	00
20.	ICM	Soybean	Low yield	-	ICM in Soybean (JS-335)	01	00	00	00	3.75	00	00	00	00
21.	IPM	Summer groundnut	Low yield	-	IPM in Summer Groundnut (DH-86)	01	00	00	00	2.60	00	00	00	00
22.	IPM	Red gram	Nutrient deficiency, high pest and disease incidence	-	IPM in Red gram	01	00	00	01	0.60	-	-	03	16 lit
23.	ICM	Green gram	Nutrient deficiency, high pest and disease incidence	-	ICM in Green gram	01	00	00	00	0.75	-	-	-	-
24.	ICM	Black gram	Nutrient deficiency, high pest and disease incidence	-	ICM in Black gram	01	00	00	00	0.75	-	-	-	-
25.	ICM	Bengal gram	Nutrient deficiency, high pest and disease incidence	-	ICM in Bengal gram (Rabi)	01	00	00	00	2.40	-	-	-	-
26.	ICM	Cotton	Nutrient deficiency, high pest and disease incidence	-	ICM in Bt-cotton	04	00	00	00	-	-	-	05	80 kg 24 ltr

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

G		G e	G / /	No	o.of prog	rammes con	ducted
S. No	Title of Technology	Source of technology	Crop/enter prise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1.	Evaluation of groundnut varieties	ICRISAT, Hyderabad	Groundnut	03	-	01	-
2.	Evaluation of soybean varieties	UAS, Dharwad	Soybean	03	-	01	ı
3.	Micronutrient management in Maize	KVK, Dharwad	Maize	02	-	01	-
4.	Micronutrient management in soybean	ICRISAT, Hydrabad	Soybean	02	-	01	-
5.	Evaluation of maize hybrid	UAS, Dharwad	Maize	05	-	01	ı
6.	Management of <i>Spodoptera</i> in groundnut	UAS, Dharwad	Groundnut (Kharif)	03	-	01	-
7.	Infertility management through nutrition	IVRI, Izatanagar	Dairy	05	-	01	-
8.	ICM in Little millet variety Sukshema	ARS, Hanumanamatti	Little millet	-	12	03	Field day
9.	ICM in Foxtail millet variety HMT-100-1	ARS, Hanumanamatti	Foxtail millet	-	14	02	-
10.	Varietal demonstration of Arjun and soil application of FeSO <sub>4</sub> + ZnSO <sub>4</sub> @ 25 kg /ha with 50 kg vermicompost / ha as basal dose	UAS, Bangalore	Maize	-	06	01	-
11.	Popularization of purified Byadagi Kaddi / Dabbi Chilli variety	UAS, Dharwad	Chilli	-	09	06	-
12.	Use of Azolla and enriched dry fodder in animal feed	UAS, Dharwad	Dairy	-	05	14	-
13.	Treatment of ecto- parasites in sheep	KVFSU, Bidar	Sheep	-	10	02	-
14.	Popularization of barnyard millet	-	Baryard millet	-	05	03	-
15.	Use of Envirofit chula	Colarado State University Engine & Engineering Conversion Lab by U.S.	Envirofit chula	-	08	02	-
16.	Serrated sickle for harvesting of sorghum	RHSc, Dharwad	Serrated sickle	-	20	03	-
17.	Groundnut decorticator	UAS, Bangalore	Groundnut decorticator	-	03	02	-
18.	ICM in Groundnut (GPBD-4)	UAS, Dharwad	Groundnut	-	05	01	Field day
19.	ICM in Sunflower (KBSH-53)	UAS, Bangalore	Sunflower	-	12	01	-
20.	ICM in Soybean (JS-335)	UAS, Dharwad	Soybean	-	12	01	Field day
21.	IPM in Summer Groundnut (DH-86)	UAS, Dharwad	Summer groundnut	-	05	01	-
22.	IPM in Red gram	UAS, Dharwad	Red gram	-	12	01	Field day
23.	ICM in Green gram	UAS, Dharwad	Green gram	-	12	01	-
24.	ICM in Black gram	UAS, Dharwad	Black gram	-	12	01	-
25.	ICM in Bengal gram (Rabi)	UAS, Dharwad	Bengal gram	-	12	01	-
26.	ICM in Bt-cotton	UAS, Dharwad	Cotton	-	18	04	-

## 3.B2 contd..

	No. of farmers covered															
		O	FT			F	LD			Trai	ning		Ot	hers (	Specif	(v)
	Gene			/ST	Gen		SC/	ST	Gen			/ST	Gen		SC	• -
	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
1.	01	00	02	00	00	00	00	00	14	04	08	03	00	00	00	00
2.	03	00	00	00	00	00	00	00	17	02	09	05	00	00	00	00
3.	01	00	01	00	00	00	00	00	11	05	05	02	00	00	00	00
4.	05	01	01	01	00	00	00	00	09	01	03	02	00	00	00	00
5.	03	01	00	01	00	00	00	00	11	02	07	01	00	00	00	00
6.	02	01	02	00	00	00	00	00	09	04	08	03	00	00	00	00
7.	05	05	00	00	00	00	00	00	08	04	05	03	00	00	00	00
8.	00	00	00	00	06	03	02	01	23	12	18	03	42	15	13	06
9.	00	00	00	00	07	04	00	03	18	04	17	03	00	00	00	00
10.	00	00	00	00	03	02	01	00	09	02	06	01	00	00	00	00
11.	00	00	00	00	08	01	00	00	35	12	26	08	00	00	00	00
12.	00	00	00	00	02	00	03	00	180	94	27	18	00	00	00	00
13.	00	00	00	00	05	00	00	00	32	04	18	05	00	00	00	00
14.	00	00	00	00	00	03	00	02	00	52	00	34	00	00	00	00
15.	00	00	00	00	00	08	00	00	00	35	00	28	00	00	00	00
16.	00	00	00	00	00	00	16	04	11	28	04	12	00	00	00	00
17.	00	00	00	00	00	02	00	01	13	34	02	08	00	00	00	00
18.	00	00	00	00	04	00	01	00	12	01	07	00	25	08	10	06
19.	00	00	00	00	04	01	02	01	13	02	07	01	00	00	00	00
20.	00	00	00	00	07	04	01	00	08	02	11	00	00	00	00	00
21.	00	00	00	00	05	00	00	00	11	01	05	02	00	00	00	00
22.	00	00	00	00	07	02	02	01	07	04	09	01	24	03	17	02
23.	00	00	00	00	06	05	04	00	13	03	08	01	00	00	00	00
24.	00	00	00	00	07	00	00	05	07	01	03	04	00	00	00	00
25.	00	00	00	00	07	01	03	01	09	00	02	00	00	00	00	00
26.	00	00	00	00	20	08	06	03	254	34	98	45	00	00	00	00

#### **PART IV - On Farm Trial**

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

Thematic areas	Cereals	Oilseeds	Vegetables	TOTAL
Integrated Nutrient Management	01	01	00	02
Varietal Evaluation	01	02	00	03
Integrated Pest Management	00	01	00	01
Total	02	04	01	07

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

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

Thematic areas	Cattle	TOTAL
Nutrition Management	01	01
TOTAL	01	01

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

#### 4.B. Achievements on technologies Assessed and Refined

#### 4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient	Maize	Micro nutriment management in Maize	02	02	0.8
Management	Soybean	Micro nutriment management in soybean	02	02	1.0
Varietal Evaluation	Groundnut	Evaluation of groundnut varieties	03	03	1.0
	Soybean	Evaluation of soybean varieties	05	05	1.0
	Maize	Evaluation of maize hybrid	05	05	2.0
Integrated Pest Management	Groundnut	Management of Spodoptera in groundnut	05	05	1.0
Total			22	22	6.8

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

#### 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
Nutrition management	Cattle	Management of infertility in dairy animals	05	05
Total			05	05

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

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

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinemen t needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Groundnut	Rainfed	Low yield in local varieties	Evaluation of groundnut varieties	03	Varietal evalution	• Yield • Pest & disease incidence	<ul> <li>Pod weight</li> <li>No.of pod /plant</li> <li>% pest &amp; disease incidence</li> <li>Economics</li> </ul>	• GPBD -4 variety recorded higher yield	High yield	-	-
Soybean	Rainfed	Low yield in local varieties	Evaluation of soybean varieties	03	Varietal evalution	• Yield • Pest & disease incidence	Seed     weight     % Pest &     disease     incidence     Economics	• JS-335 recorded higher yield	High yield	-	-
Maize	Rainfed	Micronutrient deficiency and low yield	Micro nutriment management in Maize	02	Integrated nutrient management	<ul><li> Grain yield q/ac.</li><li> Fodder yield t/ac</li></ul>	<ul><li>No. of kernels/co</li><li>b</li><li>Grain yield /cob</li></ul>	Band application of vermicompost along with recommend dose of nutrients yielded high	<ul><li>Good yield</li><li>More green fodder</li><li>Good cob filling</li></ul>	-	-
Soybean	Rainfed	Micronutrient deficiency	Micro nutriment management in soybean	02	Integrated nutrient management	• Yield • Pest & disease incidence	• % Pest & disease incidence • Economics	• Yield • Quality maintenance	High yield	-	-
Maize	Rainfed	Incidence of Turcicum leaf blight leads to low yield	Evaluation of maize hybrid	05	Varietal evaluation	Grain Yield q/ac. Fodder yield t/ac  Table 1  Fodder yield t/ac	• No. of kernels/co b • Grain yield /cob	NAH-2049     recorded     high yield	• Good yield • Round / dent shaped seeds • Thin cob		
Groundnut	Irrigated	Incidence of Spodoptera	Management of Spodoptera in groundnut	05	Spodoptera Managemen t	• Yield • Pest incidence	<ul><li>% foliage damage</li><li>Pod weight</li><li>Economics</li></ul>				
Cattle	-	Infertility, repeat breeding, decreased milk yield and growth rate	Management of infertility in dairy animals	0 5	Feeding of concentrate mixture + 30 g mineral mixture	Conception % Milk yield	-	Conception rate (28%) Milk yield (5%)	Farmers accepted the technology & adopted		-

#### Contd..

	Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
Groundnut	Technology option 1 (Farmer's practice) TMV-2	Local	2250	Kg/ha	40500	3.3
	Technology option 2 GPBD-4	UAS, Dharwad	2813	Kg/ha	55125	4.1
	Technology option 3 ICGV-91114	ICRISAT, Hyderabad	2625	Kg/ha	50250	3.8
Soybean	Technology option 1 (Farmer's practice) Monetta	Local	630	Kg/ha	25450	3.8
	Technology option 2 JS-335	UAS, Dharwad	840	Kg/ha	37000	5.0
	Technology option 3 JS-9305	UAS, Dharwad	810	Kg/ha	35350	4.8
Maize	Technology option 1 (Farmer's practice) 2 bags of DAP & 1 bag of urea	Farmers practice	5975	Kg/ha	33520	2.5
	Technology option 2 FYM with RDF (10 t FYM/ha + 150 kg N : 75 kg P and 37.5 kg K /ha + 25 kg each of Zinc Sulphate & Ferrous Sulphate enriched with 50 kg vermicompost /ha	UAS, Dharwad	6020	Kg/ha	34100	2.5
	Technology option 3 RDF (150 kg N : 75 kg P and 37.5 kg K/ha) with Vermicomopst line application ( 2 t/ha) + 25 kg each of Zinc Sulphate & Ferrous Sulphate enriched with 50 kg well decomposed FYM/ha	KVK, Dharwad	6450	Kg/ha	35913	2.5
Soybean	Technology option 1 (Farmer's practice) Application of only major nutrients (NPK)	Farmer's practice	1700	Kg/ha	28450	4.1
	Technology option 2 Soil application of 40:80:25:12:N:P:K:ZnSo <sub>4</sub> kg/ha.	UAS, Dharwad	1775	Kg/ha	29800	4.2
	Technology option 3 Soil application of 25 kg of ZnSo <sub>4</sub> & 1.25 kg Borax	ICRISAT, Hydrabad	1825	Kg/ha	30525	4.2
Maize	Technology option 1 (Farmer's practice) Use of private company hybrids( 900M)	Farmers practice	4625	Kg/ha	22783	2.1
	Technology option 2 Arjun moderately resistant to Turcicum leaf blight	UAS, Dharwad	4450	Kg/ha	21163	2.1
	Technology option 3 NAH-2049 (Nithyashree)	UAS, Bangalore	5100	Kg/ha	27175	2.4

	Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
Groundnut	Technology option 1 (Farmer's practice) Mixture of minimum two insecticides every spray	Farmers practice	6.48	q/ac	9548	2.3
	Technology option 2 Spinosad @ 0.25 ml/lt	UAS, Dharwad	7.36	q/ac	11536	2.5
	Technology option 3 Emamectin benzoate @ 0.2 gm/lt	UAS, Dharwad	8.24	q/ac	13624	2.6

	Technology Assessed	Source of Technology	No. of Animal s	Concep tion (%)	Avg. milk yield (liter)	Avg. fat (%)	Concentrate feed cost (Rs./cow/day)	Concentrate feed cost (Rs./lit)	Income from Concentrate Feed (Rs./cow/day)	Income from Concentrate Feed (Rs./cow/120 days)
	Technology option 1 (Farmer's practice)	Farmers practice	10	10	6.0	3.3	-	-	-	-
Cattle	Technology option 2 Feeding of concentrate mixture 2 kg/cow	UAS, Dharwad	10	15	6.8	3.5	18.00	2.64	7.50	900.00
	Technology option 3 Feeding of concentrate mixture + 30 g mineral mixture	IVRI, Izatnagar	10	35	7.8	3.8	20.00	2.56	8.50	1020.00

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

1	Title of Technology Assessed	:	Evaluation of groundnut varieties						
2	Problem Definition	:	Low yield in local varieti	es					
3	Details of technologies selected for	:	Technology option	Source					
	assessment		TMV-2 (Local)	Farmers practice					
			GPBD-4	UAS, Dharwad					
			ICGV-91114	ICRISAT, Hyderabad					
4	Source of technology	:	UAS, Dharwad, ICRISA	Γ, Hyderabad					
5	Production system and thematic area	:	low yielding varieties. groundnut is acquiring t	wing local varieties and they are Recently GPBD-4 variety of he groundnut area of this district. and ICGV-91114 are lower than					
6	Performance of the Technology with performance indicators	:	GPBD-4 yielded 28q/ha a	against 26 q/ha of ICGV-91114					
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Pest and disease incidence	е					
8	Final recommendation for micro level situation	:	Groundnut variety GPBD	0-4 yields higher than ICGV-91114					
9	Constraints identified and feedback for research	:	Nil & suitable nutrient an required	d pest management practices are					
10	Process of farmers participation and their reaction	:	Farmers were activity involved in implementing the above OFT and opined that GPBD-4 resulted in higher yield and decreased pest and disease incidence. This technology was widely accepted by the groundnut growers.						

1	Title of Technology Assessed	:	Evaluation of soybean	varieties			
2	Problem Definition	:	Low yield in local varie	ties			
3	Details of technologies selected for assessment	:	Technology option Monetta (Local) JS-335 JS-9305	Source Farmer's practice UAS, Dharwad UAS, Dharwad			
4	Source of technology	:	UAS, Dharwad				
5	Production system and thematic area	:	encouraging. One of soybean is growing o	ybean crop but the yield levels are not the main reason for lower yield in f local varieties. The high yielding tring the soybean area of the district. er soybean varieties.			
6	Performance of the Technology with performance indicators	:	JS-335 yields 21 q/ha ag	gainst 20 q/ha. of JS-9305			
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Pest and disease inciden	ice			
8	Final recommendation for micro level situation	:	Soybean variety JS-335	yields higher than other varieties.			
9	Constraints identified and feedback for research	:	Nil & suitable nutrient a required	and pest management practices are			
10	Process of farmers participation and their reaction	:	•				

1	Title of Technology Assessed	:	Micro nutriment management in Maize
2	Problem Definition	:	Micro nutrient deficiency and low yield
3	Details of technologies selected for assessment	:	RDF(150:75:37.5 kg NPK ha <sup>-1</sup> ) with vermicompost line application (2 tha <sup>-1</sup> ) + 25 kg each ZnSO <sub>4</sub> and FeSO <sub>4</sub> enriched with 50 kg well decomposed FYM ha <sup>-1</sup>
4	Source of technology	:	KVK, Dahrwad
5	Production system and thematic area	:	Rainfed and integrated nutrient management
6	Performance of the Technology with performance indicators	:	Line application of Vermicompost @ 2t ha <sup>-1</sup> along with enriched micronutrients and recommended dose of fertilizer recorded 4 and 8% increase in yield over recommended and farmers practice respectively due to more number of kernels per cob (518)
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Line application needs comparatively more labour
8	Final recommendation for micro level situation	:	Technology assessed could be adopted by the farmers
9	Constraints identified and feedback for research	:	Requires extra skilled labour
10	Process of farmers participation and their reaction	:	Farmers actively participated throughout the implementation. Enrichment of micronutrient with 50 kg FYM ha <sup>-1</sup> and line application of Vermicompost @ 2 t ha <sup>-1</sup> helped to gain good yield and more green fodder.

1	Title of Technology Assessed	:	Micro nutrient management in soybean
2	Problem Definition	:	Micro nutrient deficiency
3	Details of technologies selected for	:	RDF (40:80:25 kg NPK ha <sup>-1) and</sup> soil application of 25 kg ZnSo <sub>4</sub>
	assessment		+ 1.2 kg Borax
4	Source of technology	:	ICRISAT, Hyderabad
5	Production system and thematic area	:	Rainfed and integrated nutrient management
6	Performance of the Technology with performance indicators	:	Soil application of 25 kg of ZnSO <sub>4</sub> & 1.25 kg Borax along with enriched micronutrients and recommended dose of fertilizer recorded 4.41 and 7.35% increase in yield over recommended and farmers practice respectively.
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Soil application needs comparatively more labour
8	Final recommendation for micro level situation	:	Technology assessed could be adopted by the farmers
9	Constraints identified and feedback for research	:	Requires extra skilled labour
10	Process of farmers participation and their reaction	:	Farmers actively participated throughout the implementation. Enrichment of micronutrient with 1.25kg Borax ha <sup>-1</sup> gives higher yield.

1	Title of Technology Assessed	:	Evaluation of maize hybrid
2	Problem Definition	:	Turcicum leaf blight incidence leads to low yield
3	Details of technologies selected for assessment	:	NAH-2049 (Nithyashree)
4	Source of technology	:	UAS, Bangalore
5	Production system and thematic area	:	Rainfed and varietal evaluation
6	Performance of the Technology with performance indicators	:	Nithyashree yielded high (20.4 q/ac) compared to Arjun (17.8 q/ac) and private hybrid (18.5 q/ac). Increase in yield is to the tune of 14.6 and 10 % respectively, Compared to Arjun a hybrid released from UAS, Dharwad and a private (900 M) hybrid.
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Grains of Nithyashree were sold at a higher rate compared to private hybrid 900 M due to attractive round / dent shaped seeds and colour. Cob is thin which is appreciated by the farmers.
8	Final recommendation for micro level situation	:	NAH-2049 hybrid could be grown in Haveri district
9	Constraints identified and feedback for research	:	Nil and potential yield could be attained by intensive management.
10	Process of farmers participation and their reaction	:	Farmers were actively participated trough out the period of OFT implementation. Nithyashree is good hybrid compared to Arjun and is on par with private hybrids with respect to yield and quality of grains.

1	Title of Technology Assessed	:	Management of infertility in dairy animals
2	Problem Definition	:	Infertility, repeat breeding, decreased milk yield and growth rate
3	Details of technologies selected for assessment	:	Infertility is major problem in dairy production, it leads to 20-30% economic loss. This is due to deficiency of certain vitamins and minerals in the feed. The feeding of concentrate mixture alone not met the requirement of vitamins and minerals, hence supplementation of extra mineral mixture along with the concentrate feed is required to over come the above problem. Feeding of concentrate mixture + 30 g mineral mixture/day/3 months
4	Source of technology	:	IVRI, Izatnagar
5	Production system and thematic area	:	Nutritional management in dairy animals
6	Performance of the Technology with	:	Conception rate (28 % )
	performance indicators		Milk yield (5%)
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	:	Good and accepted the technology

# 4.D1. Results of Technologies Refined: Nil

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

# PART V - FRONTLINE DEMONSTRATIONS

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

SI.	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Themati c area	Technology Demonstrated	Area (ha)		dei	. of farme monstratio	Reasons for shortfall in achievement	
0.	Ca	Sivuuion	Year	J	V.	H	curcu		Proposed	Actual	SC/ST	Others	Total	
1		Rainfed	Kharif & 2010-11	Groundnut	GPBD-4	1	ICM	<ul> <li>Improved variety (GPBD-4).</li> <li>Seed treatment with Trichoderma @ 4 g/kg.</li> <li>Rhizobium treatment @ 400 g/ha.</li> <li>RDF (25 :50:25) NPK kg./ha.</li> <li>Gypsum application @ 500 kg/ha.(35 DAS)</li> </ul>	05	05	01	04	05	-
2	spe	Rainfed	Kharif & 2010-11	Soybean	JS-335	ı	ICM	<ul> <li>Promotion of high yielding JS-335 variety</li> <li>Seed treatment with Rhizobium + PSB,</li> <li>ZnSO4 application</li> </ul>	05	05	01	08	12	-
3	Oilseeds	Rainfed	Kharif & 2010-11	Sunflower	ı	KBSH-53	ICM	<ul> <li>Promotion of Sunflower hybrid KBSH-53</li> <li>Soil application of sulphur @ 25 kgs/ha</li> <li>Foliar spray with Borax @ 0.2 %</li> <li>HaNPV @ 250 LE/ha</li> </ul>	05	05	03	05	12	-
4		Irrigated	Rabi & 2010-11	Groundnut	98-HQ	1	ICM	<ul> <li>Promotion of high yielding DH-86 variety</li> <li>Scientific nutrient management</li> </ul>	05	05	00	05	05	-
5	Pulses	Rainfed	Kharif & 2010	Redgram	BSMR-736	1	ICM	<ul> <li>Seed treatment with Trichoderma @ 5 gm/kg</li> <li>Application of ZnSO4 @ 15 kg/ha</li> <li>Bird perches (20/ha)</li> <li>Pheromone traps (5 traps/ha)</li> <li>Nipping at 50 DAS</li> <li>Ha.NPV (100 LE/Ac.)</li> </ul>	05	05	03	09	12	-

Sl. N	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Themati c area	Technology Demonstrated	Area (	(ha)		. of farmer monstratio		Reasons for shortfall in achievement
0.	Ca	Situation	Year		Va	Ħ	carca		Proposed	Actual	SC/ST	Others	Total	
6		Rainfed	Kharif & 2010	Greengram	S-4	ı	ICM	<ul> <li>Promotion of high yielding variety S-4</li> <li>Seed treatment with Trichoderma @ 5 g/kg &amp; Rhizobium + PSB</li> <li>Foliar spray with Quinalphos @ 2 ml/lit</li> <li>Foliar spray with carbendazim @ 1gm/lit</li> </ul>	05	05	04	11	15	-
7		Rainfed	Kharif & 2010	Blackgram	DU-1	ı	ICM	<ul> <li>High yielding variety DU-1</li> <li>Seed treatment with Trichoderma @ 5 gm/kg &amp; Rhizobium + PSB</li> </ul>	05	05	05	07	12	- 1
8		Irrigated	Rabi & 2010-11	Bengalgram	A-1	1	ICM	<ul> <li>Seed treatment with Trichoderma</li> <li>Sorghum as a sprinkle crop</li> <li>Use of bird perches (20/ha)</li> <li>Use of pheromone traps (05/ha)</li> <li>Spraying of methomyl @0.6g/l</li> <li>Spraying of Nimbicidin@5 ml/l</li> <li>Spraying of Chlorpyriphos @2.5ml/l</li> <li>Drenching of carbendazim@ 2 gm/lit.</li> </ul>	05	05	04	08	12	-
9	Cereals	Rainfed	Kharif & 2010	Maize	1	Arjun	ICM	Varietal demonstration of Arjun and Soil application of FeSO4 + ZnSO4 (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose	03	03	01	05	06	-
10	ets	Rainfed	Kharif & 2010	Little	Suksh	ı	ICM	<ul> <li>Popularization of Sukshema</li> <li>RDF –30:15:15 NPK kg /ha</li> </ul>	05	05	03	09	12	-
11	Millets	Rainfed	Kharif & 2010	Foxtail	HMT- 100-1	ı	ICM	<ul> <li>Popularization of HMT-100-1</li> <li>RDF -30:15:15 NPK kg /ha</li> </ul>	05	05	11	03	14	-

Sl. N	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Themati c area	Technology Demonstrated	Area (	ha)		of farmer		Reasons for shortfall in achievement
0.	Cal	Situation	Year		Va	Ĥ	C area		Proposed	Actual	SC/ST	Others	Total	
12	Vegetables	Irrigated	Kharif & 2010	Chilli	Byadgi kaddi	ı	ICM	Popularization of purified Byadagi Kaddi chilli variety	05	03	01	08	09	-
13	Dairy	-	Kharif 2010	ı	ı	I	Feed and fodder	Use of azolla and enriched dry fodder in animal feed	05	05	-	05	05	-
14	Sheep and goat	-	Kharif 2010	1	Local	ı	Disease manage ment	Treatment of ecto- parasites in Sheep	10	10	-	10	10	-
	Imple	ments												
15	Serrated sickle	-	2010-11	Sorghum	ı	ı	Drudgery reduction	Serrated sickle for harvesting sorghum	-	-	04	16	20	-
16	Groundnut decorticato r	-	2010-11	Groundnut	1	1	Drudgery reduction	Use of Groundnut decorticator for shelling of groundnut	-	-	01	02	03	-
	Other	rs (specify)												
17	Envirofi t chulah	-	2010-11	Envirofi t chulah	1	ı	Drudgery reduction	Use of Envirofit chulah for fuel efficiency and Drudgery reduction.	-	-	00	08	08	-
18	Value addition	-	2010-11	Barnyard millet	1	ı	Value addition	Value addition to Barnyard millet	-	-	-	-	05	-

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

	<b>F</b> .	Farm							_	Sta	tus o	f soil	
Sl. No.	Category	ing Situa tion	Season and Year	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	N	P	K	Previous crop grown
1		Rainfed	Kharif & 2010-11	Groundnut	GPBD-4	-	ICM	<ul> <li>Improved variety (GPBD-4).</li> <li>Seed treatment with Trichoderma @ 4 g/kg.</li> <li>Rhizobium treatment @ 400 g/ha.</li> <li>RDF (25 :50:25) NPK kg./ha.</li> <li>Gypsum application @ 500 kg/ha.(35 DAS)</li> </ul>	Kharif & 2010-11	M	M	M	Cotton, Jowar, sunflower
2	Oilseeds	Rainfed	Kharif & 2010-11	Soybean	JS-335	-	ICM	<ul> <li>Promotion of high yielding JS-335 variety</li> <li>Seed treatment with Rhizobium + PSB,</li> <li>ZnSO4 application</li> </ul>	Kharif & 2010-11	M	M	Н	Chilli, Jowar, Maize
3	Oils	Rainfed	Kharif & 2010-11	Sunflower	-	KBSH-53	ICM	<ul> <li>Promotion of Sunflower hybrid KBSH-53</li> <li>Soil application of sulphur @ 25 kgs/ha</li> <li>Foliar spray with Borax @ 0.2 %</li> <li>HaNPV @ 250 LE/ha</li> </ul>	Kharif & 2010-11	M	M	Н	Jowar, groundnut, Bengalgram, Safflower
4		Irrigated	Rabi & 2010-11	Groundnut	DH-86	-	ICM	<ul> <li>Promotion of high yielding DH-86 variety</li> <li>Scientific nutrient management</li> </ul>	Rabi & 2010-11	L	M	M	Maize, Sunflower
5	Pulses	Rainfed	Kharif & 2010	Redgram	BSMR- 736	-	ICM	<ul> <li>Seed treatment with Trichoderma @ 5 gm/kg</li> <li>Application of ZnSO4 @ 15 kg/ha</li> <li>Bird perches (20/ha)</li> <li>Pheromone traps (5 traps/ha)</li> <li>Nipping at 50 DAS</li> <li>Ha.NPV (100 LE/Ac.)</li> </ul>	Kharif & 2010	L	M	M	Groundnut, Bengalgram, Sunflower
6	Pu	Rainfed	Kharif & 2010	Greengram	S-4	-	ICM	<ul> <li>Promotion of high yielding variety S-4</li> <li>Seed treatment with Trichoderma @ 5 g/kg &amp; Rhizobium + PSB</li> <li>Foliar spray with Quinalphos @ 2 ml/lit</li> <li>Foliar spray with carbendazim @ 1gm/lit</li> </ul>	Kharif & 2010	L	M	M	Groundnut, Bengalgram Chilli, Sunflower

	>	Farm								Sta	itus (	of soil	1
Sl. No.	Category	ing Situa tion	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	N	P	K	Previous crop grown
7		Rainfed	Kharif & 2010	Blackgram	DU-1	-	ICM	High yielding variety DU-1     Seed treatment with Trichoderma @ 5 gm/kg     & Rhizobium + PSB	Kharif & 2010	L	M	M	Groundnut, Jowar, Sunflower
8		Irrigated	Rabi & 2010-11	Bengalgram	A-1	-	ICM	<ul> <li>Seed treatment with Trichoderma</li> <li>Sorghum as a sprinkle crop</li> <li>Use of bird perches (20/ha)</li> <li>Use of pheromone traps (05/ha)</li> <li>Spraying of methomyl @0.6g/l</li> <li>Spraying of Nimbicidin@5 ml/l</li> <li>Spraying of Chlorpyriphos @2.5ml/l</li> <li>Drenching of carbendazim@ 2 gm/lit.</li> </ul>	Rabi & 2010-11	L	M	Н	Maize, Groundnut
9	Cereals	Rainfed	Kharif & 2010	Maize	-	Arjun	ICM	Varietal demonstration of Arjun and Soil application of FeSO <sub>4</sub> + ZnSO <sub>4</sub> (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose	Kharif & 2010	M	M	M	Cotton, Bengalgram Groundnut
10	Millets	Rainfed	Kharif & 2010	Little millet	Sukshema	-	ICM	<ul> <li>Popularization of Sukshema</li> <li>RDF –30:15:15 NPK kg /ha</li> </ul>	Kharif & 2010	L	L	М	Cotton, Maize
11	Mil	Rainfed	Kharif & 2010	Foxtail millet	HMT- 100-1	-	ICM	<ul> <li>Popularization of HMT-100-1</li> <li>RDF –30:15:15 NPK kg /ha</li> </ul>	Kharif & 2010	L	L	M	Cotton, Maize
13	Vegetables	Irrigated	Kharif & 2010	Chilli	Byadgi kaddi	-	ICM	Popularization of purified Byadagi Kaddi chilli variety	Kharif & 2010	M	M	Н	Groundnut Sunflower Cabbage

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

**5.B.1.** Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	g situatio	No. of	Area		Yiel	d (q/ha)		%	Ecor	nomics of ( (Rs.,	demonstra /ha)	tion	]	Economics (Rs.)	of check ha)	
C	Name of the technology demonstrated	Var	Hyl	situ	Demo.	(ha)		Demo		Check	Increase	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
				- 3			H	L	A	Спсси		Cost	Return	Return	Don	Cost	Return	Return	DON
Oi	seeds																		
Groundnut	<ul> <li>Improved variety (GPBD-4).</li> <li>Seed treatment with Trichoderma @ 4 g/kg.</li> <li>Rhizobium treatment @ 400 g/ha.</li> <li>RDF (25:50:25) NPK kg./ha.</li> <li>Gypsum application @ 500 kg/ha.(35 DAS)</li> </ul>	GPBD-4		Rainfed	05	05	28.0	22.5	26.5	20.2	31.18	17900	68900	51000	3.9	16600	52520	35920	3.2
Soybean	<ul> <li>Promotion of high yielding JS-335 variety</li> <li>Seed treatment with Rhizobium + PSB,</li> <li>ZnSO4 application</li> </ul>	JS-335	1	Rainfed	12	05	16.0	12.0	15.80	12.30	28.46	9200	34760	25560	3.80	8800	27060	18260	3.10
Sunflower	<ul> <li>Promotion of Sunflower hybrid KBSH-53</li> <li>Soil application of sulphur @ 25 kgs/ha</li> <li>Foliar spray with Borax @ 0.2 %</li> <li>HaNPV @ 250 LE/ha</li> </ul>	1	KBSH-53	Rainfed	12	05	15.5	13.0	14.50	12.20	18.85	9400	40600	31200	4.30	9200	34160	24960	3.70
Groundnut	Promotion of high yielding GPBD-4 variety     Scientific nutrient management	GPBD-4	1	Irrigated	05	05	21.3	18.6	20.1	14.1	42.5	10600	52260	41660	4.93	10680	36660	25980	3.43
Pu	lses																		
Redgram	<ul> <li>Seed treatment with Trichoderma @ 5 gm/kg</li> <li>Application of ZnSO4 @ 15 kg/ha</li> <li>Bird perches (20/ha)</li> <li>Pheromone traps (5 traps/ha)</li> <li>Nipping at 50 DAS</li> <li>Ha.NPV (100 LE/Ac.)</li> </ul>	BSMR-736	1	Rainfed	12	05	14.0	12.5	13.25	10.8	23.07	9800	47700	37900	4.90	9400	38880	29480	4.10

Crop	Name of the technology demonstrated	Variety	Hybrid	g situatio	No. of	Area		Yiel	d (q/ha)		%	Ecor	nomics of o (Rs.)		tion	]	Economics (Rs.)		
Ç	Name of the technology demonstrated	Var	Hyl	r ar g situ	Demo.	(ha)	Н	Demo L	A	Check	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Greengram	<ul> <li>Promotion of high yielding variety S-4</li> <li>Seed treatment with Trichoderma @ 5 g/kg &amp; Rhizobium + PSB</li> <li>Foliar spray with Quinalphos @ 2 ml/lit</li> <li>Foliar spray with carbendazim @ 1gm/lit</li> </ul>	S-4	1	Rainfed	12	05	8.5	6.0	7.0	5.80	20.68	8700	38500	29800	4.42	8200	31900	23700	3.89
Blackgr	<ul> <li>High yielding variety DU-1</li> <li>Seed treatment with Trichoderma @ 5 gm/kg</li> <li>&amp; Rhizobium + PSB</li> </ul>	DU-1	ı	Rainfed	12	05	9.0	7.5	8.4	6.8	23.52	9200	50400	41200	5.50	8700	40800	32100	4.70
Bengalgram	<ul> <li>Seed treatment with Trichoderma</li> <li>Sorghum as a sprinkle crop</li> <li>Use of bird perches (20/ha)</li> <li>Use of pheromone traps (05/ha)</li> <li>Spraying of methomyl @0.6g/l</li> <li>Spraying of Nimbicidin@5 ml/l</li> <li>Spraying of Chlorpyriphos @2.5ml/l</li> <li>Drenching of carbendazim@ 2 gm/lit.</li> </ul>	A-1	ı	Irrigated	12	05	11.0	8.5	9.5	7.5	26.67	9600	28500	18900	2.97	9200	22500	13300	2.45
Ce	reals																		
Maize	Varietal demonstration of Arjun and Soil application of FeSO4 + ZnSO4 (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose	1	Arjun	Rainfed	07	03	60.5	55.0	58.0	55.0	5.5	20000	53650	33650	2.7	19000	50875	31875	2.7
Mi	llets																		
Little	• Popularization of Sukshema • RDF –30:15:15 NPK kg /ha	Suksh	ı	Rainfed	12	05	18.0	14.5	16.0	13.50	18.50	6800	24000	17200	3.5	6500	20250	13750	3.1
Foxtail	Popularization of HMT-100-1     RDF –30:15:15 NPK kg /ha	HMT- 100-1	ı	Rainfed	12	05	16.5	14.0	15.00	12.50	20	6400	18000	11600	2.8	6000	15000	9000	2.5
Ve	getables		_																
Chilli	Popularization of purified Byadagi Kaddi chilli variety		ı	Irrigated	15	03	9.5	7.5	8.64	6.92	24.86	22846	103680	80834	4.54	21630	83040	61410	3.84

# Data on additional parameters other than yield

Data on other parameters	s in relation to technology demonstrated	
Parameter with unit	Demo	Check
Pod rot in groundnut (%)	85	40
Leaf eating caterpillar in groundnut (%)	70	20
Purple seed stain in soybean (%)	80	30
Leaf eating caterpillar in soybean (%)	75	25
Powdery mildew in sunflower (%)	80	30
Leaf eating caterpillar in sunflower (%)	70	20
Fusarium wilt in redgram (%)	90	40
Pod borer in redgram (%)	85	20
Powdery mildew in greengram (%)	70	30
Pod weevil in greengram (%)	65	20
Powdery mildew in black gram (%)	70	30
Leaf eating caterpillar in blackgram (%)	80	25
Fusarium wilt in bengalgram (%)	85	35
Pod borer in Bengalgram (%)	80	20
Turcicum leaf blight in maize (%)	60	40
Stem borer in maize (%)	85	20
Green ear in little millet (%)	70	40
Stem borer in little millet (%)	80	25
Blast in foxtail millet (%)	80	40
Stem borer in foxtail millet (%)	75	20
Fusarium wilt in chilli (%)	60	40

Thrips in chilli (%)	70	25
Acanthospermum hispidum in little millet (%)	78	53
Mimosa pudica in little millet (%)	63	49
Ageratum conyoides in little millet (%)	72	56
Acanthospermum hispidum in foxtail millet (%)	69	46
Mimosa pudica in foxtail millet (%)	73	58
Ageratum conyoides in foxtail millet (%)	85	63
Borreria hispida in maize (%)	70	50
Bidens pilosa in maize (%)	65	48
Digitaria marginata in maize (%)	58	49
Euphorbia geniculata in maize (%)	69	43
Ageratum conyzoiders in groundnut (%)	58	47
Leucas aspera in groundnut (%)	63	45
Celosia argentia in groundnut (%)	68	47
Cynodon dactylon in sunflower (%)	56	43
Croton sparsiflorus in sunflower (%)	49	41
Bidens pilosa in soybean (%)	63	50
Digitaria marginata in blackgram (%)	61	44
Bidens pilosa in blackgram (%)	53	41
Borreria hispida in greengram (%)	58	45
Digitaria marginata in greengram (%)	47	40

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

Type of	Name of the technology	Dwood	No. of	No.		Yie	ld (c	ı/ha)	%	Econ	omics of o Rs./u		tion	I	Economics (Rs./ı		
livestock	demonstrated	Breed	Demo	of Units	I	)em	0	Check if any	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					Н	L	Α										
Azolla	Use of azolla and enriched dry fodder in animal feed	-	05	05	-	-	-	-	10 milk yield	-	-	-	-	-	-	-	-
Sheep and goat	Treatment of ecto- parasites in Sheep	Local	10	10	-	-	-	-	10	-	-	-	-	-	-	-	-

# Data on additional parameters other than yield

	Data on other parameters in relation	n to technology demonstrated
Parameter with unit	Demo	Check if any
Reduction of % of disease	80 %	20%
Hb %	9 %	-

5.B.3. Fisheries: Nil

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

Entomoico	Name of the	Variety/ No.		Units/		Yi	eld (	q/ha)	%			demonstrator (Rs./m2)				s of check or (Rs./m2)	
Enterprise	technology demonstrated	species	Demo	Area {m²}	H	Dem L	10 A	Check if any	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Others (pl.specify)																	
Value addition	Value addition to Barnyard millet	-	05	-	-	-	-	-	-	-	-	-	-	-	-	-	-

# Data on additional parameters other than yield

	Data on other parameters in relatio	n to technology demonstrated
Parameter with unit	Demo	Local
Income generated by sale of Barnyard millet (Rs./kg)	40	17

### 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	our ment in days	%	Savings in labour	Econ	omics of o		ition	I	Economics (Rs.)		
implement	in Rs.	uemonsti ateu	Demo	demo in ha	Demo	Check	save	(Rs./ha)	Gross cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Serrated		Serrated sickle for						300								
sickle	50	harvesting	20	-	12	15	20		_	-	-	-	-	-	-	-
		sorghum														
Groundnut		Use of Groundnut						800/qt								
decorticator	2400	decorticator for														
	2400	shelling of	03	-	01	09	92		-	-	-	-	-	-	-	-
		groundnut														
Envirofit		Use of Envirofit						-								
chulah	850	chulah for fuel														
		efficiency and	08		-	-	45		-	-	-	-	-	-	-	-
		Drudgery reduction.														

### 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
Groundnut decorticator (seed damage %)	5-6	10-15
Envirofit chulah (Cooking time (min)- Rice)	15	22
Envirofit chulah (Cooking time (min) – Dal)	17	30
Envirofit chulah (Cooking time (min) – water )	2.5	06

## **5.B.6.** Cotton

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

Sl. No.	Category	Technology Demonstrated	Variety	Hybrid	Season and	Area (	(ha)		of farme nonstratio		Reasons for shortfall in achievement
					year	Proposed	Actual	SC/ST	Others	Total	
	Production	➤ Seed treatment with Trichoderma harzianum @ 10 gm/kg seed	Bt- Cotton	-	Kharif	15	7.2	01	17	18	-
	Technology	against soil -borne diseases.	Kanaka		2010						
		➤ Bhendi trap crop (1:20 ratio).									
		Use of Maize and Redgram as border crops.									
		➤ Pheromone traps @ 5 /ha for monitoring Boll worms.									
		➤ Sticky traps @ 20 /ha									
		> Spraying of Neem seed kernel extract (NSKE) @ 5%.									
		> Spraying of Planofix @ 0.25 ml / litre at flowering stage.									
		> Two sprays of MgSO4 @ 1 % at 90 and 110 days.									
		> Two sprays of KnO3 @ 2 % at flowering and boll formation									
		stage.									
		Nipping at 80 days after sowing.									

# **5.B.6.2** Production technology demonstrations

# **Performance of demonstrations**

Farming	Technology	Area	No.of	Variety	Hebrid	Yield	(q/ha)	%	Eco		demonstrat ./ha)	ion	Econo	mics of lo	cal check (R	ks./ha)
situation	Demonstrated	(ha)	demo.	variety	Hybrid	Demo	Local	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

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

Cat egor y	Farming situation	Technology Demonstrated		No.of demo.	Variety	Hybrid	Yield (q/ha)		%	Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
							Demo	Local	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Bt hybrids	Rainfed	<ul> <li>Seed treatment with Trichoderma harzianum @ 10 gm/kg seed against soil –borne diseases.</li> <li>Bhendi trap crop (1:20 ratio).</li> <li>Use of Maize and Redgram as border crops.</li> <li>Pheromone traps @ 5 /ha for monitoring Boll worms.</li> <li>Sticky traps @ 20 /ha</li> <li>Spraying of Neem seed kernel extract (NSKE) @ 5%.</li> <li>Spraying of Planofix @ 0.25 ml / litre at flowering stage.</li> <li>Two sprays of MgSO4 @ 1 % at 90 and 110 days.</li> <li>Two sprays of KnO3 @ 2 % at flowering and boll formation stage.</li> <li>Nipping at 80 days after sowing.</li> </ul>	7.2	18	Kanaka		18.21	15.04	21.07	15584	83766	68182	5.40	17084	69184	52100	4.07

5.B.6.3 Integrated pest management demonstrations :Nil

**5.B.6.4 Demonstrations on farm implements :Nil** 

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

Extension activity	No. of	]	Participant	s	SC/ST			
·	Programmes	Male	Female	Total	Male	Female	Total	
Consultancy	00	58	11	69	12	03	15	
Conventions	00	00	00	00	00	00	00	
Demonstrations	04	54	28	82	08	06	14	
Diagnostic surveys	03	28	06	34	08	00	08	
Exhibition	00	00	00	00	00	00	00	
Farmer study tours	00	00	00	00	00	00	00	
Farmers Field school	00	00	00	00	00	00	00	
Field Days	00	00	00	00	00	00	00	
Field visits	52	46	06	52	11	01	12	
Gram sabha	04	90	30	120	21	08	29	
Group discussions	08	180	23	203	32	06	38	
Kisan Gosthi	00	00	00	00	00	00	00	
Kisan Mela	00	00	00	00	00	00	00	
Training for Extension Functionaries	02	70	08	78	12	00	12	
Training for farmers	08	180	48	228	31	12	43	
Viedo show	00	00	00	00	00	00	00	
Newspaper coverage	00	00	00	00	00	00	00	
Popular articles	00	00	00	00	00	00	00	
Publication	00	00	00	00	00	00	00	
Radio talks	00	00	00	00	00	00	00	
T.V. Programme	00	00	00	00	00	00	00	
Others (Pl.specify)	00	00	00	00	00	00	00	
TOTAL	78	706	160	866	135	36	171	

 ${\bf 5.B.6.6 Technical\ Feedback\ on\ the\ demonstrated\ technologies\ on\ all\ crops\ /\ enterprise}$ 

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1.	Groundnut	<ul> <li>Improved variety (GPBD-4).</li> <li>Seed treatment with Trichoderma @ 4 g/kg.</li> <li>Rhizobium treatment @ 400 g/ha.</li> <li>RDF (25:50:25) NPK kg./ha.</li> <li>Gypsum application @ 500 kg/ha.(35 DAS)</li> </ul>	<ul> <li>Foliage remained green till the harvest</li> <li>No incidence of leaf spot</li> <li>Quality fodder</li> </ul>
2.	Soybean	<ul> <li>Promotion of high yielding JS-335 variety</li> <li>Seed treatment with Rhizobium + PSB</li> <li>ZnSO4 application</li> </ul>	<ul><li>Reduced pest &amp; disease incidence</li><li>High yield</li><li>Non shattering</li></ul>
3.	Sunflower	<ul> <li>Promotion of Sunflower hybrid KBSH-53</li> <li>Soil application of sulphur @ 25 kg/ha</li> <li>Foliar spray with Borax @ 0.2 %</li> <li>HaNPV @ 250 LE/ha</li> </ul>	<ul> <li>Black &amp; attractive seeds</li> <li>High yield</li> <li>High oil content (40-42%)</li> <li>Premium price</li> </ul>
4.	Groundnut	<ul> <li>Promotion of high yielding variety DH-86</li> <li>Scientific nutrient management</li> </ul>	<ul><li>Reduced incidence of bud necrosis</li><li>Suitable for Rabi/summer</li><li>High yield</li><li>Bold seeds</li></ul>
5.	Redgram	<ul> <li>Seed treatment with Trichoderma @ 5 gm/kg</li> <li>Application of ZnSO4 @ 15 kg/ha</li> <li>Bird perches (20/ha)</li> <li>Pheromone traps (5 traps/ha)</li> <li>Nipping at 50 DAS</li> <li>Ha.NPV (100 LE/Ac.)</li> </ul>	<ul> <li>Reduced incidence of both wilt and SMD</li> <li>Reduced pod borer incidence</li> <li>High yield</li> </ul>
6.	Greengram	<ul> <li>Promotion of high yielding variety S-4</li> <li>Seed treatment with Trichoderma @ 5 g/kg &amp; Rhizobium + PSB</li> <li>Foliar spray with Quinalphos @ 2 ml/lit</li> <li>Foliar spray with carbendazim @ 1gm/lit</li> </ul>	<ul> <li>Non shattering of pods after maturity</li> <li>Bright green, bold and shiny seeds</li> <li>High yield</li> </ul>
7.	Blackgram	<ul> <li>High yielding variety DU-1</li> <li>Seed treatment with Trichoderma @ 5 gm / kg</li> <li>&amp; Rhizobium + PSB</li> </ul>	<ul> <li>Suitable under double cropping system</li> <li>Reduced incidence of stem fly</li> <li>Bold seeds</li> <li>High yield</li> </ul>
8.	Bengalgram	<ul> <li>Seed treatment with Trichoderma</li> <li>Sorghum as a sprinkle crop</li> <li>Use of bird perches (20/ha)</li> <li>Use of pheromone traps (05/ha)</li> <li>Spraying of methomyl @0.6g/l</li> <li>Spraying of Nimbicidin@5 ml/l</li> <li>Spraying of Chlorpyriphos @2.5ml/l</li> <li>Drenching of carbendazim@ 2 gm/lit.</li> </ul>	<ul> <li>Reduced incidence of wilt &amp; pod borer</li> <li>More number of branches per plant</li> <li>High yield</li> </ul>
9.	Maize	Varietal demonstration of Arjun and Soil application of FeSO4 + ZnSO4 (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose	Reduced incidence of tursicum leaf blight
10.	Little millet	<ul> <li>Popularization of Sukshema</li> <li>RDF –30:15:15 NPK kg /ha</li> </ul>	<ul><li> Quality grains and fodder</li><li> High yield</li></ul>
11.	Foxtail millet	<ul> <li>Popularization of HMT-100-1</li> <li>RDF –30:15:15 NPK kg /ha</li> </ul>	Quality grains and fodder     High yield
12.	Chilli	Popularization of purified Byadagi Kaddi chilli variety	<ul><li>Negligible number of off types</li><li>Uniform crop stand</li><li>High yield</li><li>More price</li></ul>
13.	Value addition	Value addition to Barnyard millet	<ul><li>High fiber rich</li><li>Best diet for obese, diabetic and patients with heart problem</li></ul>
14.	Drudgery reduction	Serrated sickle for harvesting sorghum	Less labour requirement     Handy to use     More area coverage compared to traditional
15.	Drudgery	Use of Groundnut decorticator for shelling	Less labour requirement

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
	reduction	of groundnut	Handy to use
			Drudgery to palm can be minimized
16.	Drudgery	Use of Envirofit chulah for fuel efficiency	Less cooking time
	reduction	and Drudgery reduction.	More fuel efficient

Farmers' reactions on specific technologies

Fari	Farmers' reactions on specific technologies											
S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back									
1.	Groundnut	<ul> <li>Improved variety (GPBD-4).</li> <li>Seed treatment with Trichoderma @ 4 g/kg.</li> <li>Rhizobium treatment @ 400 g/ha.</li> <li>RDF (25 :50:25) NPK kg./ha.</li> <li>Gypsum application @ 500 kg/ha.(35 DAS)</li> </ul>	High yielding, plants are greenish upto harvesting stage									
2.	Soybean	<ul> <li>Oypsum application © 300 kg/lia.(33 DAS)</li> <li>Promotion of high yielding JS-335 variety</li> <li>Seed treatment with Rhizobium + PSB,</li> <li>ZnSO4 application</li> </ul>	High yielding and lesser pest and disease									
3.	Sunflower	<ul> <li>Promotion of Sunflower hybrid KBSH-53</li> <li>Soil application of sulphur @ 25 kgs/ha</li> <li>Foliar spray with Borax @ 0.2 %</li> <li>HaNPV @ 250 LE/ha</li> </ul>	High yielding and lesser pest and disease									
4.	Groundnut	Promotion of high yielding DH-86 variety     Scientific nutrient management	High yielding and lesser pest and disease									
5.	Redgram	<ul> <li>Seed treatment with Trichoderma @ 5 gm/kg</li> <li>Application of ZnSO4 @ 15 kg/ha</li> <li>Bird perches (20/ha)</li> <li>Pheromone traps (5 traps/ha)</li> <li>Nipping at 50 DAS</li> <li>Ha.NPV (100 LE/Ac.)</li> </ul>	High yielding and lesser wilt and SMD									
6.	Greengram	<ul> <li>Promotion of high yielding variety S-4</li> <li>Seed treatment with Trichoderma @ 5 g/kg &amp; Rhizobium + PSB</li> <li>Foliar spray with Quinalphos @ 2 ml/lit</li> <li>Foliar spray with carbendazim @ 1gm/lit</li> </ul>	High yielding and Non shattering pods									
7.	Blackgram	<ul> <li>High yielding variety DU-1</li> <li>Seed treatment with Trichoderma @ 5 gm/kg &amp; Rhizobium + PSB</li> </ul>	High yielding and lesser pest and disease									
8.	Bengalgra m	<ul> <li>Seed treatment with Trichoderma</li> <li>Sorghum as a sprinkle crop</li> <li>Use of bird perches (20/ha)</li> <li>Use of pheromone traps (05/ha)</li> <li>Spraying of methomyl @0.6g/l</li> <li>Spraying of Nimbicidin@5 ml/l</li> <li>Spraying of Chlorpyriphos @2.5ml/l</li> <li>Drenching of carbendazim@ 2 gm/lit.</li> </ul>	High yielding and lesser pest and disease									
9.	Maize	Varietal demonstration of Arjun and Soil application of FeSO4 + ZnSO4 (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose	Lesser incidence of tursicum leaf blight									
10.	Little millet	<ul> <li>Popularization of Sukshema</li> <li>RDF –30:15:15 NPK kg /ha</li> </ul>	High yielding and lesser pest and disease									
11. 12.	Foxtail millet Chilli	<ul> <li>Popularization of HMT-100-1</li> <li>RDF –30:15:15 NPK kg /ha</li> <li>Popularization of purified Byadagi Kaddi chilli variety</li> </ul>	High yielding and lesser pest and disease Farmers getting higher yields									
13.	Value addition	Value addition to Barnyard millet	<ul> <li>compared to local Varieties</li> <li>High cost</li> <li>Barnyard millet is rarely grown in Haveri district</li> <li>Drudgery involved in cleaning</li> </ul>									
14.	Drudgery	Serrated sickle for harvesting sorghum	Labour saving									

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
	reduction		• Convenient to use
15.	Drudgery reduction	Use of Groundnut decorticator for shelling of groundnut	<ul><li>Labour saving</li><li>Easy to use</li><li>Efficient than traditional method</li></ul>
16.	Drudgery reduction	Use of Envirofit chulah for fuel efficiency and Drudgery reduction.	<ul><li>Fuel and time saving</li><li>Portable and easy to carry</li><li>Convenient to use</li></ul>

## 5.B.6.8 Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	03	140	
2	Farmers Training	73	1604	-
3	Media coverage	00	00	-
4	Training for extension functionaries	01	20	-

# PART VI – DEMONSTRATIONS ON CROP HYBRIDS

# **Demonstration details on crop hybrids**

Type of	Name of the technology	Name	No. of	Area	rea Yield (q/ha)			%	*Economics of demonstration (Rs./ha)			ation	*Economics of check (Rs./ha)				
Breed	demonstrated	of the hybrid	Demo	(ha)	Demo		Check	Increase	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR	
		пурга			Н	L	A	Cneck		Cost	Return	Return	DCK	Cost	Return	Return	DCK
Cereals																	
Maize	Varietal demonstration of Arjun and Soil application of FeSO4     + ZnSO4 (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose	Arjun	07	03	60.5	55.0	58.0	55.0	5.5	20000	53650	33650	2.7	19000	50875	31875	2.7
Total			07	03													
Oilseeds																	
Sunflower	<ul> <li>Promotion of Sunflower hybrid KBSH-53</li> <li>Soil application of sulphur @ 25 kgs/ha</li> <li>Foliar spray with Borax @ 0.2 %</li> <li>HaNPV @ 250 LE/ha</li> </ul>	KBSH- 53	12	05	15.5	13.0	14.50	12.20	18.85	9400	40600	31200	4.30	9200	34160	24960	3.70
Total			12	05													

# PART VII. TRAINING

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

	<b>N</b> 6				No. of	Particip	ants			
Area of training	No. of Course		General			SC/ST		G	rand Tota	al
Area of training	s	Male	Female	Total	Mal e	Femal e	Tot al	Male	Femal e	Tota l
<b>Crop Production</b>										
Crop Diversification	1	0	0	0	10	2	12	10	2	12
Integrated Farming	3	0	0	0	52	0	52	52	0	52
Integrated Crop	1	7	10	10	0	1	1	7	12	20
Management Soil and water test	2	7	0	19	38	0	38	7 38	13 0	20 38
Livestock Production and	2	U	U	0	38	U	38	38	U	38
Management										
Dairy Management	4	11	23	34	32	2	34	43	25	68
Poultry Management	3	55	0	55	25	1	26	80	1	81
Home Science/Women empowerment										
Value addition	1	0	10	10	0	11	11	0	21	21
Rural Crafts	16	0	99	99	0	7	7	0	106	106
Women and child care	1	0	6	6	0	4	4	0	10	10
Plant Protection										
Integrated Pest Management	2	23	0	23	3	0	3	26	0	26
Integrated Disease Management	4	16	0	16	76	0	76	92	0	92
Bio-control of pests and										
diseases	2	21	31	52	5	8	13	26	39	65
Production of Inputs at site										
Vermi-compost production	3	28	12	40	14	0	14	42	12	54
Capacity Building and Group Dynamics										
Group dynamics	3	42	11	53	10	7	17	52	18	70
Role of KVKs in transfer	1	1	1.4		0	0	0			1.5
of technology TOTAL	1 47	204	14 218	15 <b>422</b>	0 <b>265</b>	0 43	0 <b>308</b>	1 <b>469</b>	14 <b>261</b>	15 <b>730</b>

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

	No. of				No.	of Partici	pants			
Area of training	Courses		General			SC/ST			Grand Tot	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop Production</b>										
Integrated Farming	5	164	15	179	35	8	43	199	23	222
Livestock Production	on and Mai	nagemer	nt							
Dairy Management	9	242	86	328	86	30	116	328	116	444
Poultry Management	1	0	0	0	20	4	24	20	4	24
Animal Disease Management	1	64	0	64	21	0	21	85	0	85
Feed and Fodder technology	4	104	4	108	96	44	140	200	48	248
Sheep and goat management	2	209	11	220	32	0	32	241	11	252
Conservation of indigenous breeds	1	82	0	82	13	0	13	95	0	95
Home Science/Wom	ien empow	erment								
Household food security by kitchen gardening and nutrition gardening	1	0	28	28	0	7	7	0	35	35
Processing and cooking	2	30	80	110	20	45	65	50	125	175
Gender mainstreaming through SHGs	3	0	106	106	0	48	48	0	154	154
Storage loss minimization techniques	1	0	18	18	0	12	12	0	30	30
Location specific drudgery production	5	24	42	66	50	66	116	74	108	182
Rural Crafts	4	0	104	104	0	50	50	0	154	154
Women and child care	4	0	195	195	0	72	72	0	267	267
Plant Protection										
Integrated Pest Management	19	482	39	523	168	32	200	650	73	723
Integrated Disease Management	29	782	179	961	311	114	425	1093	293	1386
Bio-control of pests and diseases	3	76	67	143	38	34	72	114	101	215
Production of Input	s at site	•	•	•	•	•	•	•	•	•
Vermi-compost production	4	14	2	16	59	12	71	73	14	87
Organic manures production	1	42	10	52	9	0	9	51	10	61
Capacity Building a	nd Group	Dynami	cs			•			•	
Entrepreneurial development of farmers/youths	1	17	0	17	5	0	5	22	0	22
TOTAL		l	i .	i	i		1	1	1	i .

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

Area of training	No. of		No. of Participants										
	Courses		General			SC/ST		Grand Total					
vg		Male	Female	Total	Male	Female	Total	Male	Female	Total			
Production of organic inputs	1	13	11	24	0	0	0	13	11	24			
TOTAL	1	13	11	24	0	0	0	13	11	24			

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

Area of	No. of Courses	No. of Participants										
training			General			SC/ST		Grand Total				
ti anning		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Value addition	1	22	20	42	9	8	17	31	28	59		
TOTAL	1	22	20	42	9	8	17	31	28	59		

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

	No. of Courses	No. of Participants										
Area of training		General				SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Drudgery reducing technologies for farm women	01	0	15	15	0	05	05	00	20	20		
Cattle insurance	01	49	00	49	15	00	15	64	00	64		
Total	2	49	15	64	15	5	20	64	20	84		

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

#### 7.G. Sponsored training programmes

		No. of Courses	No. of Participants										
S.	Area of		General			SC/ST			Grand Total				
No.	training		M ale	Female	Total	Male	Female	Total	Male	Fem ale	Total		
1	Income generating activities	02	21	25	46	03	16	19	24	41	65		
	Total	02	21	25	46	03	16	19	24	41	65		

#### Details of sponsoring agencies involved

#### 1. Jala Samvardhana Yojana Sangha, Haveri

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

S. Area of No. of						No. of Participants					
No.	training	Courses		General		SC/ST			Grand Total		
1101	vi uning	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
4.i.	Tailoring, stitching, embroidery, dying etc.	02	0	37	37	0	5	5	0	42	42
	Grand Total	02	0	37	37	0	5	5	0	42	42

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

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

Nature of	No. of		of Particip		No. of	Participa	nts SC	No.of	extension p	ersonnel
Extension	Programmes		(General)		N / - 1 -	/ ST Female	T-4-1	N ( - 1 -	T71-	TF-4-1
Programme	03	Male 78	Female	Total 93	Male		Total 43	Male	Female	Total 04
Field Day Kisan Mela			15		36	07		04	00	
Kisan Meia Kisan Ghosthi	00	00	00	00	00		00	00	00	75
	40	623	220	843	146	136	282	63	12	
Exhibition	03	708	202	910	183	37	220	60	50	110
Film Show Method	03	43	03	46	26	06 164	32	12	04	16
	30	425	188	613	157	164	321	60	26	66
Demonstrations Farmers Seminar	01	23	06	29	17	04	21	00	00	00
Workshop	00	00	00	00	00	00	00	00	00	00
Group meetings	50	521	214	735	376	108	484	118	46	164
Lectures delivered	143	00	00	00	00	00	00	00	00	00
as resource persons	143	00	00	00	00	00	00	00	00	00
Newspaper	27	00	00	00	00	00	00	00	00	00
coverage	27	00	00	00	00	00	00	00	00	00
Radio talks	13	00	00	00	00	00	00	00	00	00
TV talks	06	00	00	00	00	00	00	00	00	00
Popular articles	25	00	00	00	00	00	00	00	00	00
Extension	08	00	00	00	00	00	00	00	00	00
Literature										
Advisory Services	476	248	60	308	106	82	188	00	00	00
Scientific visit to	134	283	109	392	91	77	168	00	00	00
farmers field										
Farmers visit to	800	396	147	543	148	109	257	00	00	00
KVK										
Diagnostic visits	82	62	02	64	15	03	18	00	00	00
Exposure visits	15	167	40	207	82	11	93	00	00	00
Ex-trainees	00	00	00	00	00	00	00	00	00	00
Sammelan										
Soil health Camp	08	148	84	232	73	35	108	00	00	00
Animal Health	05	179	97	276	102	91	193	00	00	00
Camp										
Agri mobile clinic	00	00	00	00	00	00	00	00	00	00
Soil test campaigns	02	31	07	38	25	03	28	00	00	00
Farm Science Club	00	00	00	00	00	00	00	00	00	00
Conveners meet										
Self Help Group	48	00	848	848	00	592	592	00	00	00
Conveners										
meetings				0.0				0.0		
Mahila Mandals	00	00	00	00	00	00	00	00	00	00
Conveners										
meetings										
Celebration of										
important days Breast feeding	01	8	23	31	04	18	22	02	02	04
week	01	0	23	31	04	10	22	02	02	04
Parthenium	01	06	00	06	07	02	09	00	00	00
awareness week	01	00	00	00	07	02	U)	00	00	00
International rural	01	8	04	12	03	06	09	00	00	00
women's day				12			0)			
World food day	01	8	04	12	03	06	09	00	00	00
Women in	01	2	13	15	02	06	08	00	00	00
agriculture day	"-	_					00			
Farmer's day	01	00	12	12	04	08	12	00	00	00
International	01	0	12	12	04	08	12	00	00	00
women's day										-
Total	1923	3943	2265	6208	1587	1483	3070	319	140	439
•	•									

# <u>PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS</u>

# 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
	Groundnut	GPBD-4	-	8.76	25206	15
	Groundnut	GPBD-5	-	0.8	2880	2
Oilseeds	Soybean	JS-335	-	1.4	8064	4
Oliseeds	Soybean	JS-9305	-	0.6	3456	1
	Sunflower	KBSH-53	-	2.69	5111	2
	Sunhemp	Local	-	0.9	2074	7
			Total	15.15	46791	31
	Horsgram	GPM-6	-	15.8	1710	25
Deslares	Redgram	Asha	-	0.7	2545	4
Pulses	Redgram	BSMR 736	-	2.01	7328	12
	Redgram	Maruti	-	3.91	14446	4
			Total	22.42	26029	45
Commercial crops	Cotton	DDHC-11	-	5.98	19346	7
Millota	Savi	Sukshema	-	0.63	1008	3
Millets	Navane	HMT 100-1	-	0.76	208	4
			Total	44.94	93382	90

# 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
Vegetable seedlings						
	Pomogranate	Local	-	02	40.00	01
Fruits	Sapota	-	DHS-1	172	8600.00	03
	Sapota	-	DHS-2	590	20500.00	05
Spices	Curryleaf	Suvasini	-	561	2805.00	05
Forest Species	Tamarind	Local	-	25	500.00	01
Total				1350	32445.00	15

9.C. Production of Bio-Products: Nil

9.D. Production of livestock materials: Nil

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

# 10. A. Literature Developed/Published

## (A) KVK News Letter

Date of start	Periodicity	Number of copies distributed
2005	Quarterly	300

## (B) Literature developed/published

Item	Title	Authors name	Number		
Research p	papers				
	Parasitization of <i>Apanteles galleriae</i> Wilkinson on Greater Waxmath Galleria mellonella Linnaeus	Hanumantha Swamy, B.C., Reddy, M.S. and Venkatesh Hosamani			
	Predatory wasp menace on honey bees and its management	Hanumantha Swamy, B.C., Venkatesh Hosamani and Reddy, M.S.	1		
	Incidence of Greater Waxmath, Galleria mellonella in Indian honey bee colonies	Hanumantha Swamy, B.C., Reddy, M.S. and Venkatesh Hosamani			
	Diurnal variation of pollinators in onion ecosystem	Venkatesh Hosamani, Hanumantha Swamy, B.C. and Reddy, M.S.			
	Adoption of IPM technologies by cotton growers	Hanumantha Swamy, B.C., Yadahalli, K.B., Nagaraja, M.V. and Venkatesh Hosamani			
	Vermiculture for self employment	Hanumantha Swamy, B.C., Yadahalli, K.B., Nagaraja, M.V. and Venkatesh Hosamani			
	Management of sett rot of sugar cane	Yadahalli, K.B., Adiver, S.S., Benagi, V.I. and Hanumantha Swamy, B.C.			
ract	Management of black rot of cabbage	Yadahalli, K.B., Hanumantha Swamy, B.C. and Benagi, V.I.	1.5		
Abstract	Survey of powdery mildew of sunflower in Haveri District of Northern Karnataka	Yadahalli, K.B., Hanumantha Swamy, B.C. and Nagaraja, M.V	15		
	Effect of <i>Cercospora zinniae</i> culture filtrate (Toxin) on tomato plants	Cercospora zinniae culture filtrate Yadahalli, K.B. and Hanumantha Swamy, B.C.			
	Bioefficacy of fungal pathogens against greater waxmoth, <i>Galleria mellonella</i>	greater waxmoth, Galleria mellonella Venkatesh Hosamani			
	Influence of different parts of bee comb on the bionomics of greater waxmoth, <i>Galleria mellonella</i>				
	Prospects of medicinally important indigenous species of western ghats in Uttar Kannada	Vinuta Muktamath, Ganapathi, T, Geeta Kalakanavar and Umesh Muktamath			
	Role performance and training need identification of Panchayat women members	Geeta Kalakanavar and Chhaya Badiger			
	A Review on drudgery reducing technologies for farm women	Geeta Kalakanavar, M.V. Nagaraja, Vinuta Muktamath, and S.Y. Mukartal			
Technical reports	-	-	-		
News letters	KVK News letter	KVK Staff	03		
Technical bulletins	-	-	-		
<u> </u>	Poshakamshagala Agara kiru Dhanyagalu	Kalakanavar Geeta, Soumya, T.M. and Rathod	20		

Item	Title	Authors name	Number	
		Vijaykumar Rathod Vijaykumar, Kalakanavar Geeta and		
	Janapriyavagabekiruva bele – Thale	Soumya, T.M.		
	Asamatholana Ahara – Pashugalalli	Mukartal, S.Y., Soumya, T.M. and	-	
	Anarogya	Kalakanavar Geeta,		
		Yadahalli, K.B., Hanumanthaswamy, B.C. and		
	Beeja Beejopacharadante Bele	Soumya, T.M.		
	Kabbige Ushna ugi Upchara	Yadahalli, K.B., Hanumanthaswamy, B.C. and		
	Rabbige Oshila ugi Openara	Hosamani Venkatesh		
	Surakshitha Rachanegalalli tharakari sasi	Rathod Vijaykumar, Soumya, T.M. and Gaddanakeri, M.A.		
	Hittala gidavu Maddu	Kalakanavar Geeta and Soumya, T.M.	-	
	Swa udhyogakkagi erehulu sakanike	Hanumanthaswamy, B.C. and Yadahalli, K.B.	-	
	Savayava Krishikana Yashogathe	Hanumanthaswamy, B.C. and Yadahalli, K.B.	-	
	Constitute to the advanced description of the sector	Soumya, T.M., Kalakanavar Geeta and Ashok,	1	
	Susthira hainodyamakkagi mevina belegalu	M.		
	Krishi Mahitiya ATM – Kiosk	Soumya, T.M.and Kalakanavar Geeta	1	
	Jeevasathvagalalli adagide Jeevanada sathva	Muktamath Vinuta and Kalakanavar Geeta		
	Kabbannu rogagalinda rakshisi, Adaya hecchisi	Yadahalli, K.B. and Hanumantha Swamy, B.C.		
	Keetagalige bale haki	Hanumantha Swamy, B.C., Yadahalli, K.B. and		
		Venkatesh Hosamani		
	Battada beleyalli pramuka keetagala nirvahane	Hanumantha Swamy, B.C., Yadahalli, K.B. and Venkatesh Hosamani		
	Bendi beleya pramuka rogagala nirvahane	Yadahalli, K.B., Venkatesh Hosamani and Hanumantha Swamy, B.C.		
	Dasthanu keetagala nirvahane	Venkatesh Hosamani, Hanumantha Swamy, B.C.and Yadahalli, K.B.		
	Alakstisadiri adina halannu	Geeta Kalakanavar and S.Y. Mukartal	-	
	Pashugalli Vishprassand prasangagalli veelamb beda	S.Y. Mukartal and B.N. Suresh		
	Kechallu benne	S.Y. Mukartal and B.U. Umesh		
	Savayava krishi	Yadahalli, K.B., Hanumanthaswamy, B.C., Venkatesh Hosamani, Soumya, T.M., M. V. Nagaraj. and Mukartal, S.Y.		
ıre	Jaivika gobbaragalu	Yadahalli, K.B., Hanumanthaswamy, B.C., Venkatesh Hosamani, Soumya, T.M., M. V. Nagaraj. and Mukartal, S.Y.		
Extension literature	Jaivika shileeendragalu			
nsion	Jaivika keetanashaka shileeendragalu	Hanumanthaswamy, B.C., Yadahalli, K.B., Venkatesh Hosamani and Gaddanakeri, M.A.	amy,	
Exte	Bevu	Venkatesh Hosamani, Hanumantha Swamy, B.C, Yadahalli, K.B., M. V. Nagaraj, and Geeta Kalakanavara		
	Haraka	Nagappa Harijan, Geeta Kalakanavara, Ramachandra, R.K., Durgannavara, F.M., Mukartal, S.Y. and Hanumantha Swamy, B.C.,		

Item	Title	Authors name	Number
	Hirigunada kirikalu save	Nagappa Harijan, Durgannavara, F.M.,	
		Ramachandra, R.K., Palleda, Y.B., Mukartal,	
		S.Y. Hanumantha Swamy, B.C. and	
		Gaddanakeri, M.A.	
	Baragu	Nagappa Harijan, Durgannavara, F.M.,	
		Ramachandra, R.K., Palleda, Y.B.,	
		Hanumantha Swamy, B.C., Mukartal, S.Y. and	
		Gaddanakeri, M.A.	
	Azolla ondu puraka pashu ahara	Mukartal, S.Y., Nagappa Harijan,	
		Ramachandra, R.K., Durgannavara, F.M.,	
		Hanumantha Swamy, B.C. and Gaddanakeri,	
		M.A.	
	Mamsada koligala palane	Mukartal, S.Y., Yadahalli, K.B., Hanumantha	
		Swamy, B.C., Soumya, T.M., Geeta	
		Kalakanavara, Gaddanakeri, M.A Sairabanu,	
		M. and Venkatesh Hosamani	
	Adaya Uthpanna chatuvatikegagi	Geeta Kalakanavara, Soumya, T.M.,	
	sabunupudi hagu patre shuchigolisuva pudi	Yadahalli, K.B., Hanumantha Swamy, B.C,	
	thayarike	Mukartal, S.Y., Gaddanakeri, M.A. and	
		Sairabanu, M.	
	Mavina moulya vardhita kadyagalu	Geeta Kalakanavara, Yadahalli, K.B.,	
		Hanumantha Swamy, B.C., Soumya, T.M.,	
		Mukartal, S.Y., Gaddanakeri, M.A. and	
		Sairabanu, M.	
	Dana karugalige baruva samanya rogagalu	Mukartal, S.Y., Yadahalli, K.B., Hanumantha	
	mathu avugala hathoti kramagalu	Swamy, B.C., Soumya, T.M., Geeta	
		Kalakanavara, Gaddanakeri, M.A.and	
		Sairabanu, M.	
	Grameena mahileyarigagi shrama kadime	Geeta Kalakanavar, Soumya, T.M., Mukartal,	1
	maduv sadhanagalu	S.Y., Yadahalli, K.B., Hanumanthaswamy,	
		B.C., Gaddanakeri, M.A. AND Sairabanu,	
		Muganur	
	Keetanashakagala balakeyalli	Hanumanthaswamy, B.C., Venkatesh	1
	munnecharike kramagalu	Hosamani, Yadahalli, K.B., Gaddanakeri,	
	mamoonariko kramagara	M.A., Mukartal, S.Y. and Geeta Kalakanavar	
	Bahu Upayogi nellikayi	Geeta Kalakanavar	1
TOTAL	1 1 2 1		54

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

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
	<u>-</u>		

- 10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period). Nil
- 10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year: Nil
- 10.E. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs): Nil
- $10.F. \quad Indicate \ the \ specific \ training \ need \ analysis \ tools/methodology \ followed \ for: Nil$

#### 10.G. Field activities

i. Number of villages adopted : 30
 ii. No. of farm families selected : 200
 iii. No. of survey/PRA conducted : 10

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

Status of establishment of Lab :

Laboratory has been instituted with all the requisite infrastructure analysis is being taken up

1. Year of establishment : 01.04.2005

2. List of equipments purchased with amount :

Sl. No.	Name of Equipments	Qty (No's)	Rate	Cost
1.	Electronics weighing scale with battery Back up, (Physical Balance)	1	10471.00	10471.00
2.	Electronic Weighing Machine	1	57000.00	57000.00
3.	Elico Microprocessor based pH Analyser.	1	8900.00	8900.00
	Accessories		<del>-</del>	
	Combined Electrode type CL 51B for pH Meter Model : LI612	1	850.00	850.00
4.	Elico Microprocessor based EC TDS Analyser with CC-03B and ATC Probe.	1	9790.00	9790.00
	Accessories			
	Conductivity cell	1	1000.00	1000.00
5.	Elico Microprocessor based Flame photometer (SS),	1	32040.00	32040.00
	Accessories			
	Calcium filter	1	2200.00	2200.00
6.	Elico Microprocessor based Scanning Visible Spectro photometer.  Model: SL 177	1	40050.00	40050.00
	Accessories			
	Software and interfacing accessories for Spectrophotometer One Pair of Quartz Cuvettes, 100 nos. of Plastic Cuvettes, Tungsten Halogen lamp for Spectrophotometer		20000.00	20000.00
7.	Double Distillation water still (Glass)Silica Sheathed heater, CAP: 2 L/hr	1	16000.00	16000.00
	Accessories	1	l l	
	Spare Silica Heater for Double Distillation Water Still (Glass) Cap: 2 ltr/hr (One set –Two Nos. for Boiler I & II )	1 Set	2837.00	2837.00
8.	Double Distillation water still (Quartz)4 L./hr. Silica Sheathed heater, CAP:4 L/hr.	1	43050.00	43050.00
	Accessories			
	Spare Silica Heater for Double Distillation Water Still (Quartz) Cap:4 L/hr (One set –Two Nos. for Boiler I & II )	1 Set	5201.00	5201.00
9.	Water softner	1	3250.00	3250.00
10.	Shaking Machine	1	47025.00	47025.00
11.	Voltas Make 220 L. Capacity Refrigerator	1	10765.00	10765.00
	V-Guard Make 500 VA Stabilizer	1	1220.00	1220.00
	Refrigerator Stand	1	300.00	300.00
12.	Microprocessor based Block Digestion system	1	137350.00	142044.00
	Microprocessor based Automatic Nitrogen Distillation system	1	5494.00	142844.00
	Accessories			
	Electronic Acid Neutralizer Scrubber. Model: KEL VAC.	1	30400.00	30400.00
	S S Insert Rack. Model: KES 06 L.	1	6300.00	6300.00
	Exhaust Manifold System with Teflon Adaptors. Model: KES 06 LEM.	1	7160.00	7160.00
	Viton Tube for Triacid and Diacid Digestion. Model: KES VT.	3	3250.00	9750.00
13.	Hot air oven	1	16471.00	16471.00
14.	Hot plate	1	3046.00	3046.00
15.	Grinder	1	15435.00	15435.00
16.	Water Softener "Bhanu" Make Aqua Soft water softener (Model: AS-600)	1	9752.00	9752.00

Sl. No.	Name of Equipments	Qty (No's)	Rate	Cost
17.	Post Hole Augar Head Size: 3"	1	1200.00	1200.00
18.	Screw type Augar Head size :1.5 "	1	980.00	980.00
19.	Sieve Brass Frame	04	650.00	2860.00
20.	Laboratory wares			
	I ah anatam tahlas	03	16931.00	118517.00
	Laboratory tables	04	18944.00	75776.00
	Slotted angular iron racks	05	1421.00	7105.00
	Steel cabinet	9	5326.00	47934.00
	Wash basin	3	1500.00	45000.00
	Exhaust fan	3	1500.00	1500.00
	Laboratory racks	06	1026.00	6156.00
	Water tap with swan neck	3	785.00	2355.00
21.	Gas burner	01	1500.00	1500.00
22.	Laboratory stools	05	828.00	4140.00
23.	Laboratory Chemicals	-	-	85346.00
24.	Glassware	-	-	91357.00
Total		•		10,44,833.00

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

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1626	1594	194	97120.00
Water Samples	697	1560	196	86050.00
Manure samples	01	01	01	500.00
Total	2324	3155	391	183670

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

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	976	944	187	64620.00
Water Samples	973	940	189	54850.00
Total	1949	1884	376	119470.00

# 10.I. Technology Week celebration: Nil

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

#### PART XI. IMPACT

- 11.A. Impact of KVK activities (Not to be restricted for reporting period). Nil
- 11.B. Cases of large scale adoption: Nil
- 11.C. Details of impact analysis of KVK activities carried out during the reporting period :Nil

#### PART XII – LINKAGES

#### 12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
State Dept. of Agriculture	Training programmes, joint diagnostic survey and participation in meetings, seminars and field days.
State Dept. of Horticulture	Training programmes, joint diagnostic survey and participation in meetings, seminars and field days.
Rural Development Institutes (Zilla & Taluk Panchayats)	Training programmes, joint diagnostic survey and participation in meetings, seminars and field days.
State Dept. of Animal husbandry & Veterinary Services	Training programmes, joint diagnostic survey and participation in meetings, seminars and field days.
Karnataka Milk Federation	Training programmes.
Women and Child Development Department	Training programmes.
Karnataka Oil Seeds Federation	Supply of inputs
NABARD, Vijaya Bank, State Bank of India, M.G. Bank and Syndicate Bank.	Participation in meeting, conducting training programmes and promotion of TTC.
Bharath Agro Industries Foundation, Haveri	Training programmes
GRASIM Janakalyan Trust, Kumar Pattanum	Training programmes.
Sheep and Wool Development Board	Trainings.
State Dept. of Watershed	Training programmes, IFS Demonstration, Seminars and Field days.
JSYS	Training programmes, Demonstration, Seminars and Field days.
National Horticultural Research and Development Federation	Joint implementation and participation in meeting/Training Programme
Spice Board	Joint implementation and participation in meeting/Training Programme
Different private firms dealing with Medicinal and Aromatic crops	Training Programmes
IIHR, Bangalore	Technical consultancy
NGO's	Joint implementation and participation in meeting.
Mahila Mandals and Youth Clubs	Joint implementation and participation in meeting.
Sugar Factories	Joint diagnostic survey and participation in meeting
Karnataka Sugar Institute, Belgaum	Joint diagnostic survey and participation in meeting/ Training
Successful Entrepreneurs	Training Programme/ Technical Advice
Vijaya Bank Sponsored Employment Training	Joint implementation participation in meeting and
Institute Employment Training	Training Programme.

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

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

a) Is ATMA implemented in your district

No

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

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

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks
01	Meetings	-	-	-	-
02	Research projects		-	-	-
03	Training programmes	-	-		-
04	Demonstrations	-	-	-	-
05	Extension Programmes				
	Exposure visit	To Ahamdabad and Ratnagiri district of Maharastra state For extension functionaries	01	01	00
06	Publications				
07	Other Activities				

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

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

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

#### 12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent		
April 2010	10	150	02		
May	11	150	01		
June	20	300	00		
July	23	300	05		
August	16	300	02		
September	17	500	01		
October	06	500	03		
November	15	500	01		
December	13	500	02		
January 2011	10	500	01		
February	08	500	01		
March	10	500	01		

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

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

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

Name	Date	Date of	а <u>_</u>	Details	Details of production		Amour		
of the crop	of sowing	harvest	Area (ha)	Variety	Type of Produce	Qty. (qt)	Cost of inputs	Gross income	Remarks
Cereals									
Maize	June II week	Oct II week	3.2	South African Tall	Seed	30	10000.00	66000.00	
Pulses									
Redgram	June I week	Jan End	2.4	BSMR- 736	Seed	20	7000.00	64000.00	
Others (speci	Others (specify)								
Sunheamp	June I week	Oct I week	01	Local	Seed	3	2000.00	5400.00	

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

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

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

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days	Reason for short fall
October 2009	-	1	-
November 2009	-	-	-
December 2009	-	-	-
January 2010	43	02	
February 2010	-	1	-
March 2010	42	04	
April 2010	-	1	-
May 2010	-	1	-
June 2010	41	02	
July 2010	-	1	-
August 2010	-	-	-
September 2010	-	-	-

#### 13.F. Database management

S. No	Database target	Database created		
1.	Training Database	Completed		
2.	Seeds and Planting Material Database	Completed		
3.	Frontline Demonstrations Database	Completed		
4.	Soil Analysis Data Base	Completed		
5.	Water Analysis Data Base	Completed		
6.	KVK Inventory of Assets	Under progress		
7.	Database of Extension Programmes	Under progress		
8.	Resource inventory of the District	Under progress		
9.	Farmers Database	Under Progress		
10.	KVK Accounts Database	Under progress		
11.	Technology Inventory for the District	Yet to be start		
12.	Database for Technologies assessed and Refined	Yet to be start		

# 13.G. Details on Rain Water Harvesting

Amount	Expenditur	Details of		Activities conducted					Area
sanction (Rs.in Lakh)	e (Rs.in Lakh)	infrastructure created / micro irrigation system etc.	No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)	water harvested in '000 litres	irrigated / utilization pattern
9.50	9.00	<ul><li>Mango graden plantation</li><li>Guava Plantation</li><li>Sapota plantation</li></ul>	09	04	•	162	22	-	2 ha.

#### PART XIV - FINANCIAL PERFORMANCE

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

Bank account	Name of the bank	Location	Branch	Account	Account Number	MICR	IFSC Number
			code	Name		Number	
With KVK	State Bank India	Ranebennur		SB Ac.	10811387935		

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

S. No	Items / Head	Opening balance if any	Remittance by ZPD VIII Bangalore	Actual expenditure dubitable to Council A/C	Closing balance if any	Remarks
1	Production Technology – 50 ha					
	a. Essential inputs		0.53	0.37	0.16	-
	b. POL, hiring vehicle, Kisan melas,		0.22	0.22	0.00	-
	printed materials, reports, demonstration boards					
	Total		0.75	0.59	0.16	-
2.						
	a. New		0.00	0.00	0.00	-
	equipments					
	b. Contingencies		0.00	0.00	0.00	-
	Total		0.00	0.00	0.00	-

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

S. No.	Particulars	Sanctioned	Released	Expenditure
	curring Contingencies			
1	Pay & Allowances	38.00	38.00	38.00
	Pay & Allowances (6th CPC Arrears from 1.1.2006-31.3.2011)	58.69	58.69	58.69
2	Traveling allowances	0.50	0.50	0.99
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.60	1.60	1.72
В	POL, repair of vehicles, tractor and equipments	1.00	1.00	1.39
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.60	0.60	0.39
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.35	0.35	0.14
Е	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.75	1.75	1.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.80	0.80	0.34
G	Training of extension functionaries	0.10	0.10	0.05
Н	Maintenance of buildings	0.25	0.25	0.16
I	Establishment of Soil, Plant & Water Testing Laboratory	0.00	0.00	0.00
J	Extension Activities	0.25	0.25	0.19
K	Farmers Field School	0.25	0.25	0.00
L	Library	0.05	0.05	0.025
TOTA	AL (A)	104.19	104.19	103.08
B. No	n-Recurring Contingencies			
1	Works	0.00	0.00	0.00
2	Equipments including SWTL & Furniture			
	a. Generator	1.00	1.00	0.92
	b. Power tiller	1.50	1.50	1.46
	c. Furniture & furnishing	2.00	2.00	0.00
	d. EPABX system	0.50	0.50	0.00
3	Vehicle (Four wheeler/Two wheeler, please specify)	0.00	0.00	0.00
4	Library (Purchase of assets like books & journals)	0.10	0.10	0.05
TOTA	AL (B)	5.10	5.10	2.43
C. RE	VOLVING FUND	0.00	0.00	0.00
GRAN	ND TOTAL (A+B+C)	109.29	109.29	105.51

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
		ICA	AR	
April 2008 to March 2009	1.76	4.75	3.74	2.77
April 2009 to March 2010	2.77	3.21		
April 2010 to March 2011				
		Trai	ning	
April 2008 to March 2009	4.43	1.55	1.92	4.06
April 2009 to March 2010	4.06	1.37	0.62	4.81
April 2010 to March 2011				

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Mrs. Geeta Kalakanavar	SMS (Home Science)	Capacity building of women managers in higher studies	J.S.S, Dharwad	21st to 25th May 2010
Mrs. Geeta Kalakanavar	SMS (Home Science)	Initiatives for rural prosperity	BIRD, Lucknow	28th June to 01st July 2010
Dr. K.B. Yadahalli	SMS (Pl. Pathology)	Technology demonstration for harnessing oil seed and pulse productivity	UAS, Dharwad	26th to 30th July 2010
Dr. S.Y. Mukartal	SMS (Animal Science)	Augmenting out reach programmes in Animal husbandry and Fisheries sector	KVAFSU, Bidar	06th and 7th August 2010
Dr. S.Y. Mukartal	SMS (Animal Science)	Emerging issues in Animal Husbandry production technologies	UAS, Dharwad	09th to 14th August 2010
Ms. Rekha K N.	Prog. Asst. (Computer)	Computerized operation training system	UAS, Dharwad	11th and 12th October 2010
Mrs. Saihira Banu Muganur	Farm Manager	Computerized operation training system	UAS, Dharwad	11th and 12th October 2010
Dr. K.B. Yadahalli	SMS (Pl. Pathology)	Improvement of Sugarcane Technology of Northern Karnataka	UAS, Dharwad	12th to 15th October 2010
Dr. B.C. Hanumanthaswamy	SMS (Ag. Entomology)	National consultancy on strategy for deployment and conservation of parasitoids of papaya mealybug	IVRI, Bangalore	30th October 2010
Mrs. Geeta Kalakanavar	SMS( Home Science)	Interface meeting of home scientists for transfer of technology	UAS, Bangalore	8th and 9th Feb, 2011

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

#### **SUMMARY FOR 2010-11**

#### I. TECHNOLOGY ASSESSMENT

#### Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient	Maize	Micro nutriment management in Maize	02
Management	Soybean	Micro nutriment management in soybean	02
Varietal Evaluation	Groundnut	Evaluation of groundnut varieties	03
	Soybean	Evaluation of soybean varieties	03
	Maize	Evaluation of maize hybrid	05
Integrated Pest Management	Groundnut	Management of Spodoptera in groundnut	05
Total			20

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Nutrition Management	Cattle	Management of infertility in dairy animals	05
Total			05

Summary of technologies assessed under various enterprises Nil

Summary of technologies assessed under home science: Nil

#### II. TECHNOLOGY REFINEMENT - Nil

## III. FRONTLINE DEMONSTRATION

Cotton

#### Frontline demonstration on cotton

	Thematic	Name of the technology	No. of	No. of	Area	Yield	(q/ha)	· %	Econ	omics of o (Rs.	demonstra /ha)	tion	]	Economics (Rs.		
Crop	Area	demonstrated	KVKs	Farmers	(ha)	Demo nstrati on	Check	Increase	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Cotton	ICM	<ul> <li>Seed treatment with Trichoderma harzianum @ 10 gm/kg seed against soil – borne diseases.</li> <li>Bhendi trap crop (1:20 ratio).</li> <li>Use of Maize and Redgram as border crops.</li> <li>Pheromone traps @ 5 /ha for monitoring Boll worms.</li> <li>Sticky traps @ 20 /ha</li> <li>Spraying of Neem seed kernel extract (NSKE) @ 5%.</li> <li>Spraying of Planofix @ 0.25 ml / litre at flowering stage.</li> <li>Two sprays of MgSO4 @ 1 % at 90 and 110 days.</li> <li>Two sprays of KnO3 @ 2 % at flowering and boll formation stage.</li> <li>Nipping at 80 days after sowing.</li> </ul>		18	7.2	18.21	15.04	21.07	15584	83766	68182	5.40	17084	69184	52100	4.07
Total				18	7.2											

# Other crops

	Thema	Name of the	No. of	No. of	Are	Yield (	q/ha)	%	Othe parame		Econo	omics of de (Rs./h		tion		*Economic (Rs.,		
Crop	tic area	technology demonstrated	KVKs	Farm er	a (ha)	Demons ration	Check	chang e in yield	Demo nstrat ion	C he ck	Gross Cost	Gross Return	Net Retur n	BC R	Gross Cost	Gross Return	Net Return	BCR
Cereals																		
Maize	Varital evaluat ion	Varietal demonstration of Arjun and Soil application of FeSO4 + ZnSO4 (@ 25 kg/ha) with 50 kg Vermi compost/ha as basal dose		07	03	58.0	55.0	5.5			20000	53650	33650	2.7	19000	50875	31875	2.7
Millets																		
Little millet	ICM	• Popularization of Sukshema RDF –30:15:15 NPK kg /ha		12	05	16.00	13.50	18.50			6800	24000	17200	3.5	6500	20250	13750	3.1
Foxtail millet	ICM	• Popularization of HMT-100-1 • RDF -30:15:15 NPK kg /ha		12	05	15.00	12.50	20			6400	18000	11600	2.8	6000	15000	9000	2.5
Oilseeds																		

	Thema	Name of the	N. O	No. of	Are	Yield (	q/ha)	%	Othe parame		Econo	omics of de (Rs./h		tion		*Economic		
Crop	tic area	technology demonstrated	No. of KVKs	Farm er	a (ha)	Demons ration	Check	chang e in yield	Demo nstrat ion	C he ck	Gross Cost	Gross Return	Net Retur n	BC R	Gross Cost	Gross Return	Net Return	BCR
Groun dnut	ICM	<ul> <li>Improved variety (GPBD-4).</li> <li>Seed treatment with Trichoderma @ 4 g/kg.</li> <li>Rhizobium treatment @ 400 g/ha.</li> <li>RDF (25:50:25) NPK kg./ha.</li> <li>Gypsum application @ 500 kg/ha.(35 DAS)</li> </ul>		05	05	26.05	20.2	31.08			17900	68900	51000	3.9	16600	52520	35920	3.2
Soybe an	ICM	<ul> <li>Promotion of high yielding JS-335 variety</li> <li>Seed treatment with Rhizobium + PSB,</li> <li>ZnSO4 application</li> </ul>		12	05	15.80	12.30	28.46			9200	34760	25560	3.80	8800	27060	18260	3.10
Sunflo wer	ICM	Promotion of Sunflower hybrid KBSH-53 Soil application of sulphur @ 25 kgs/ha Foliar spray with Borax @ 0.2 % HaNPV @ 250 LE/ha		12	05	14.50	12.20	18.85			9400	40600	31200	4.30	9200	34160	24960	3.70

	Thema	Name of the	No. of	No. of	Are	Yield (	q/ha)	%	Othe parame		Econo	omics of de (Rs./h		tion		*Economic (Rs.,		
Crop	tic area	technology demonstrated	KVKs	Farm er	a (ha)	Demons ration	Check	chang e in yield	Demo nstrat ion	C he ck	Gross Cost	Gross Return	Net Retur n	BC R	Gross Cost	Gross Return	Net Return	BCR
Groun dnut	ICM	Promotion of high yielding DH-86 variety Scientific nutrient management		05	05	20.1	14.1	42.5			10600	52260	41660	4.93	10680	36660	25980	3.43
Pulses																		
Redgr	ICM	<ul> <li>Seed treatment with Trichoderma@5 gm/kg</li> <li>Application of ZnSO4 @ 15 kg/ha</li> <li>Bird perches (20/ha)</li> <li>Pheromone traps (5 traps/ha)</li> <li>Nipping at 50 DAS Ha.NPV (100 LE/Ac.)</li> </ul>		12	05	13.25	10.8	23.07			9800	47700	37900	4.90	9400	38880	29480	4.10
Green	ICM	Promotion of high yielding variety S-4 Seed treatment with Trichoderma@ 5 g/kg & Rhizobium + PSB Foliar spray with Quinalphos@ 2 ml/lit Foliar spray with carbendazim @ 1gm/lit		12	05	7.0	5.80	20.68			8700	38500	29800	4.42	8200	31900	23700	3.89

	Thema	Name of the		No. of	Are	Yield (	q/ha)	%	Othe		Econo	omics of de (Rs./h		tion	:	*Economic		
Crop	tic area	technology demonstrated	No. of KVKs	Farm er	a (ha)	Demons ration	Check	chang e in yield	Demo nstrat ion	C he ck	Gross Cost	Gross Return	Net Retur n	BC R	Gross Cost	Gross Return	Net Return	BCR
Blackg ram	ICM	High yielding variety DU-1     Seed treatment with Trichoderma @ 5 gm/kg & Rhizobium + PSB		12	05	8.4	6.8	23.52			9200	50400	41200	5.50	8700	40800	32100	4.70
Vege	tables																	
Chilli	ICM	Popularization of purified Byadagi Kaddi chilli variety		15	03	8.64	6.92	24.86			22846	103680	80834	4.54	21630	83040	61410	3.84
		Total		116	51													,

#### Livestock

	Thematic	Name of the	No. of	No. of	No.of	Maj param		% change	Oth paran		Econ	omics of o	lemonstra	tion	I	Economics (Rs	of check	
Category	area	technology demonstrated	KVKs	Farmer	units	Demons ration	Check	in major parameter	Demons ration	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Dairy																		
Azolla	Feed & Fodder	Use of azolla and enriched dry fodder in animal feed		05	05			10 Milk yield										
Sheep and goat		Treatment of ecto-parasites in sheep		10	10			9 % Hb level										
		Total		15	15													

Fisheries -Nil

Other enterprises

Cotogogg	Name of the	No. of	No. of	No.of	Maj param		% change in major parameter	Oth paran		*Ecoi	nomics of (Rs.) or		ation	*]		s of check Rs./unit	ζ.
Category	technology demonstrated	KVKs	Farmer	units	Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Others																	
Value addition	Value addition to Barnyard millet		05	05	-	-	-	Rs. 40	Rs. 17	-	-	-	-	-	-	-	-
	Total		05	05				•									

# Women empowerment

# Farm implements and machinery

Name of		Name of the	No. of	No. of	Area	Filed obs	servation nan hour)	% change in major parameter	Labo	r reducti	on (man o	days)	Cos	t reduction Rs./Un	on (Rs./ha it ect.)	a or
the implement	Crop	technology demonstrated	KVKs	Farmer	(ha)	Demons ration	Check									
Serrated sickle	Sorghum	Serrated sickle for harvesting sorghum		20	-	31 m <sup>2</sup>	26 m <sup>2</sup>	20	03	-	-	-	300	-	-	-
Groundnut decorticator	Groundnut	Use of Groundnut decorticator for shelling of groundnut		03	-	16.25 kg	1.25kg	92	08	-	-	-	800	-	-	-
Envirofit chulah	-	Use of Envirofit chulah for fuel efficiency and Drudgery reduction.		08	-	-	-	45	-	-	-	-	-	-	-	-

# Other enterprises

# **Demonstration details on crop hybrids**

	Name of the	No. of	Area	Yield (kg/ha) /	major pai	rameter		Economic	es (Rs./ha)	
Стор	Hybrid	farmers	(ha)	Demonst- ration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Maize	Arjun	07	03	5800	5500	5.5	20000	53650	33650	2.70
Tota	l	07	03							
Oilseeds										
Sunflower	KBSH-53	12	05	14450	1220	18.85	9400	40600	31200	4.30
Tota		12	05							

# IV. Training Programme

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

					No. o	f Partici <sub>l</sub>	oants			
Area of training	No. of Cours		General			SC/ST	•	(	Grand To	tal
Area of training	es	Male	Fema le	Tot al	Male	Femal e	Tot al	Mal e	Femal e	Tota l
Crop Production										
Crop Diversification	1	0	0	0	10	2	12	10	2	12
Integrated Farming	3	0	0	0	52	0	52	52	0	52
Integrated Crop Management	1	7	12	19	0	1	1	7	13	20
Soil and water test	2	0	0	0	38	0	38	38	0	38
Livestock Production and Management										
Dairy Management	4	11	23	34	32	2	34	43	25	68
Poultry Management	3	55	0	55	25	1	26	80	1	81
Home Science/Women empowerment										
Value addition	1	0	10	10	0	11	11	0	21	21
Rural Crafts	16	0	99	99	0	7	7	0	106	106
Women and child care	1	0	6	6	0	4	4	0	10	10
Plant Protection										
Integrated Pest Management	2	23	0	23	3	0	3	26	0	26
Integrated Disease Management	4	16	0	16	76	0	76	92	0	92
Bio-control of pests and diseases	2	21	31	52	5	8	13	26	39	65
<b>Production of Inputs at site</b>										
Vermi-compost production	3	28	12	40	14	0	14	42	12	54
Capacity Building and Group Dynamics										
Group dynamics	3	42	11	53	10	7	17	52	18	70
Role of KVKs in transfer of technology	1	1	14	15	0	0	0	1	14	15
TOTAL	47	204	218	422	265	43	308	469	261	730

Farmers' Training including sponsored training programmes (Off campus)

	No. of				No. of	f Participa	nts			
Area of training	Cours		General			SC/ST		G	rand Tot	
<b>.</b>	es	Male	Female	Total	Male	Female	Total	Male	Fema le	Tota l
<b>Crop Production</b>										
Integrated Farming	5	164	15	179	35	8	43	199	23	222
Livestock Production and Management										
Dairy Management	9	242	86	328	86	30	116	328	116	444
Poultry Management	1	0	0	0	20	4	24	20	4	24
Animal Disease Management	1	64	0	64	21	0	21	85	0	85
Feed and Fodder technology	4	104	4	108	96	44	140	200	48	248
Sheep and goat management	2	209	11	220	32	0	32	241	11	252
Conservation of indigenous breeds	1	82	0	82	13	0	13	95	0	95
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	28	28	0	7	7	0	35	35
Processing and cooking	2	30	80	110	20	45	65	50	125	175
Gender mainstreaming through SHGs	3	0	106	106	0	48	48	0	154	154
Storage loss minimization techniques	1	0	18	18	0	12	12	0	30	30
Location specific drudgery production	5	24	42	66	50	66	116	74	108	182
Rural Crafts	4	0	104	104	0	50	50	0	154	154
Women and child care	4	0	195	195	0	72	72	0	267	267
<b>Plant Protection</b>										
Integrated Pest Management	19	482	39	523	168	32	200	650	73	723
Integrated Disease Management	29	782	179	961	311	114	425	1093	293	1386
Bio-control of pests and diseases	3	76	67	143	38	34	72	114	101	215
<b>Production of Inputs at site</b>										
Vermi-compost production	4	14	2	16	59	12	71	73	14	87
Organic manures production	1	42	10	52	9	0	9	51	10	61
Capacity Building and Group Dynamics										
Entrepreneurial development of farmers/youths	1	17	0	17	5	0	5	22	0	22
TOTAL	100	2332	988	3320	963	578	1541	3295	1566	4861

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

	No of	No. of Participants								
Area of training	Course		General SC/ST					Grand Total		
	S	Male	Female	Tota l	Male	Female	Tota l	Male	Female	Total
Production of organic inputs	1	13	11	24	0	0	0	13	11	24
TOTAL	1	13	11	24	0	0	0	13	11	24

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

					No. of 1	Participants					
Area of training	No. of	General			SC/ST			Grand Total			
Tires or visiting	Courses	Male	Male Female Total Male Fema		Female	Tot al	Mal e	Femal e	Total		
Value addition	1	22	20	42	9	8	17	31	28	59	
TOTAL	1	22	20	42	9	8	17	31	28	59	

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

		No. of Participants										
Area of training	No. of		General	SC/ST			G	Grand Total				
	Courses	Male	Female	Total	Total Male		Tota	Mal	Femal	Tota		
		Wiaic	Temate	Total Male		e	l	e	e	l		
Drudgery reducing technologies for farm	01	0	15	15	0	05	05	00	20	20		
women												
Cattle insurance	01	49	00	49	15	00	15	64	00	64		
Total	2	49	15	64	15	5	20	64	20	84		

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

**Sponsored training programmes** 

	gorea vianing progr	No. of Course	No. of Participants									
S.No	Area of training			General		SC/ST			Grand Total			
•	The of truming	S	Mal	Femal	Tota	Mal	Femal	Tota	Mal	Femal	Tota	
			e	e	l	e	e	1	e	e	1	
12.b.	Others (pl.specify)											
	Income generating activities	02	21	25	46	03	16	19	24	41	65	
	Total	02	21	25	46	03	16	19	24	41	65	

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

		No. of	No. of Participants									
S.N	Area of training	Course		General		SC/ST			Grand Total			
0.	The of truming	S	Mal	Femal	Tota	Mal	Femal	Tota	Mal	Femal	Tota	
		2	e	e	l	e	e	l	e	e	l	
4.i.	Tailoring, stitching,											
	embroidery, dying	02	0	37	37	0	5	5	0	42	42	
	etc.											
	<b>Grand Total</b>	02	0	37	37	0	5	5	0	42	42	

# V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	476	496	00	496
Diagnostic visits	82	82	00	82
Field Day	03	136	04	140
Group discussions	50	1219	164	1383
Kisan Ghosthi	40	1125	75	1200
Film Show	03	78	16	94
Self -help groups	48	1440	00	1440
Kisan Mela	00	00	00	00
Exhibition	03	1130	110	1240
Scientists' visit to farmers field	134	560	00	560
Plant/animal health camps	05	469	00	469
Farm Science Club	00	00	00	00
Ex-trainees Sammelan	00	00	00	00
Farmers' seminar/workshop	01	50	21	71
Method Demonstrations	30	934	66	1000
Celebration of important days	00	00	00	00
Special day celebration	07	300	00	300
Exposure visits	15	300	00	300
Others (pl.specify)	00	00	00	00
Total	897	8319	456	8775

Details of other extension programmes

Particulars	Number
Electronic Media	19
Extension Literature	08
News Letter	04
News paper coverage	27
Technical Articles	10
Technical Bulletins	05
Technical Reports	08
Radio Talks	13
TV Talks	06
Animal health amps (Number of animals treated)	05
Others (pl.specify)	00
Total	105

#### VI. PRODUCTION OF SEED/PLANTING MATERIAL

# Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
	Groundnut	GPBD-4	-	8.76	25206.00	15
	Groundnut	GPBD-5	-	0.8	2880.00	02
	Soybean	JS-335	-	1.4	8064.00	04
Oilseeds	Soybean	JS-9305	-	0.6	3456.00	01
	Sunflower	KBSH-53		2.69	5111.00	02
	Sunhemp	Local		0.9	2074.00	07
		,	Total (A)	15.15	46791.00	31
	Horsgram	GPM-6	-	15.8	1710.00	25
	Redgram	Asha	-	0.70	2545.00	04
Pulses	Redgram	BSMR 736	-	2.01	7328.00	12
	Redgram	Maruti	-	3.91	14446.00	04
			Total(B)	22.42	26029.00	45
Commercial crops	Cotton	DDHC-11	-	5.98	19346.00	07
2500	Littile millet	Sukshema	-	0.63	1008.00	03
Millets	Foxtail millet	HMT 100-1	-	0.76	208.00	04
	Total(C)					14
	Total (A+B+C)				93382	90

# Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Vegetable seedlings						
	Pomogranate	Local	-	02	40.00	01
Fruits	Sapota	-	DHS-1	172	8600.00	03
	Sapota	-	DHS-2	590	20500.00	05
Spices	Curryleaf	Suvasini	-	561	2805.00	05
Forest Species	Tamarind	Local	-	25	500.00	01
Total				1350	32445.00	15

**Production of Bio-Products Nil** 

Production of livestock and related enterprise materials - Nil

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	976	944	187	64620.00
Water	973	940	189	54850.00
Total	1949	1884	376	119470.00

#### VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
02

#### IX. NEWSLETTER

Number of issues of newsletter published
04

#### X. RESEARCH PAPER PUBLISHED

Num	iber of research paper published
Abstr	racts - 15

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

Activities conducted						
No. of Training	No. of	No. of plant materials	Visit by	Visit by		
programmes	Demonstrations	produced	farmers (No.)	officials (No.)		
09	04	-	162	22		

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