PROFORMA FOR ANNUAL REPORT 2009-10

(FOR THE PERIOD FROM OCTOBER 2008 TO SEPTEMBER 2009)

KRISHI VIGYAN KENDRA
Mangalore, Dakshina Kannada
Karnataka

PART I - GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E-mail	Web Address
	Office	FAX		
Krishi Vigyan Kendra (D.K), Kankanady, Mangalore-575002.	0824-2431872	0824-2430060	kvkdk@rediffmail.com	-

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Vice Chancellor University of Agricultural Sciences, G.K.V.K. Bangalore	080-23332442	080-23330277	vcuasbangalore_2007@rediffmail.com	www.uasbangalore.edu.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. H. Hanumanthappa	0824-2430716	9449866934	hhanumanthappa@rediffmail.com

1.4. Year of sanction: 2004

1.5. Staff Position (as on 31st August 2009)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification	Pay Scale (Rs.)	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. H.Hanumanthappa	Programme Coordinator	M	Fisheries	Ph D	16400-22400	18200.00	21-1-2006	Permanent	SC
2	SMS	Dr. Jayashree S.	Subject Matter Specialist	F	Home Science (F & N)	Ph D	8,000-13,500	9650.00	2-3-2007	Permanent	OBC
3	SMS	Dr. G. Nagesha	Subject Matter Specialist	M	Agril. Extension	Ph D	8,000-13,500	9650.00	10-3-2007	Permanent	SC
4	SMS	Dr. Parashuram Chandravanshi	Subject Matter Specialist	M	Soil Science	Ph D	8,000-13,500	9650.00	16-3-2007	Permanent	SC
5	SMS	Dr. K.M. Rajesh	Subject Matter Specialist	M	Fisheries	Ph D	8,000-13,500	9650.00	7-11-08	Permanent	General
6	SMS	Dr. Raviraj Shetty G.	Subject Matter Specialist	M	Horticulture	Ph D	8,000-13,500	8000.00	24-7-09	Permanent	General
7	SMS	Dr. Sharanabasappa	Subject Matter Specialist	M	Entomology	Ph D	8,000-13,500	8000.00	30-7-09	Permanent	General
8	Programme Assistant (Lab Tech.)/T-4	-	-	-	-	-	-	-	-	Vacant	-
9	Programme Assistant (Computer)/ T-4	Mrs. Nalinakshi	Programme Assistant (Computer)	F	-	M.A (ADCA)	-	9300.00 consolidated	7-9-2009	Work contract basis	OBC
10	Programme Assistant/ Farm Manager	Mr. Veerendra Kumar K.V.	Farm Manager	M	Plant Pathologyy	M.Sc. (Agri.)	-	9300.00 consolidated	7-9-2009	Work contract basis	SC
11	Assistant	Mr. Dayanada G.N.	Assistant	M	-	-	-	8000.00 consolidated	-	Work contract basis	-
12	Jr. Stenographer	-	-	-	-	-	-	-	-	Vacant	-
13	Driver	Mr. Rajesh N.	Tractor Driver	M	-	S.S.L.C	7275-13350	7275.00	25-10-08	Permanent	General
14	Driver	Mr. R.T. Nagaraja	Driver (LV)	M	-	7th	5800-10500	6650.00	6-11-2008	Permanent	General
15	Supporting staff	Mr. Jayaram	Messenger	M	-	PUC	4800-7275	5000.00	13-7-2007	Permanent	General
16	Supporting staff	Mr. Ashwith Kumar	Messenger	M	-	S.S.L.C	4800.00	-	7-9-2009	Work contract basis	OBC

1.6. Total land with KVK (in ha) : 9.0

Sl. No.	Item	Area (ha)
1	Under Buildings	2.0
2.	Under Demonstration Units	0.11
3.	Under Crops	6.89
4.	Orchard/Agro-forestry	-

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	24-11-2007	550	42.25	-	-	-
2.	Farmers Hostel	ICAR	24-11-2007	300	35.72	-	-	-
3.	Staff Quarters	ICAR	24-11-2007	400	32.35	-	-	-
4.	**Demonstration Units**							
a.	Demonstration Units (Fisheries)	ICAR	20-02-2007	80	1.75	-	-	-
b.	Demonstration Units (Horticulture)	ICAR	12-05-2008	260	2.0	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero DI Jeep	2004	5,00,000	128576	Good condition
M.F. Tractor 1035	2005	5,00,000	103 hrs.	Good condition
Hero Honda (Bike)	2006	40,000	17939	Good condition
Aviator	2009	50,000	977	Good condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Sprayers	2005	2,640.00	Good
Power sprayer	2008	4,800.00	Good
Drum Seeder & Cona weeder	2005	2,600.00	Good
Paddy Planting Marker	2005	1,350.00	Good
Xerox Machine	2006	75,000.00	Good
Computer & Accessories	2006-07	98,890.00	Good
Weed cutter	2008	13,000.00	Good
AV aids			
Digital Camera	2006	20,000.00	Good
Magnetic White Board	2008	3,800.00	Good

1.8. A). Details SAC meeting conducted in 2008-09

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	24-10-08	31	06	Asked to take up Coconut Nursery in large scale.	Coconut seedlings of Chowghat orange dwarf and west coast tall varieties have been raised in KVK farm and sold to the needy farmers.
				Suggested to organize trainings for farmers on the use of fingerlings in order to develop inland fisheries.	FLD on use of stunted fish finger lings has been taken up and also information is being provided through training programmes on production and rearing of stunted fish fingerlings.
				Informed to organize more on campus training programmes.	A total of 10 on campus training programmes have been organized.
				Suggested to take up Front Line Demonstration on Maize in 5 Acres of Land	In order to popularize the maize variety, OFT has been sanctioned and it will be implemented during Jan-Feb. 2010.
				Suggested to organize more number of training programmes on fisheries in collaboration with marine products development authority (MPEDA) and college of fisheries, Mangalore.	Two on campus training programmes of 7 days duration on integrated fish farming (sponsored by NFDB) and one off campus training programme on value addition to fish have been organized in collaboration with college of fisheries, Mangalore.
				Suggested to organize training programmes on improved method of compost preparation by using resource persons of Department of Microbiology G.K.V.K. Bangalore	One day seminar on modern methods of Vermicomposting and composting was organized in collaboration with Vijaya College, Mulki and Dr. B.K. Siddegowda, Associate Professor, College of Agriculture, Mandya delivered a lecture as resource person.
				Suggested to organize training programme on marine fisheries preferably during the month of June - July	Training programme on marine fisheries will be taken up after the monsoon season (after Sept. 2009).
				Suggested to take up demonstration on Ragi for popularizing it in Dakshina Kannada District.	In order to popularize Ragi, OFT has been sanctioned and it will be implemented during Rabi -2009 season.
				Suggested to organize more number of training programmes related to animal husbandry and veterinary aspects in collaboration with the department.	One training programme on animal husbandry and veterinary aspects has been organized.

				Suggested to organize more number of training programme on fisheries in collaboration with marine products development authority	In collaboration with MPEDA, training programmes will be organised in future.
				Suggested to organize training programmes in collaboration with Department of fisheries and college of fisheries in order to develop fisheries in farm pond and water tank.	Two on campus training programmes of 7 days duration on integrated fish farming (sponsored by NFDB) and one off campus training programme on value addition to fish have been already organized in collaboration with college of fisheries, Mangalore.
				Suggested to organize training programmes in collaboration with department of social welfare for other backward class people.	Discussed with concerned authorities for organizing training programmes and same will be implemented in the coming months.
				Suggested to organize more number of training programmes on orchids and high value crops.	Information on orchids and cultivation of high value crops in poly house is provided during the training programmes.
				Suggested to intimate while conducting training programmes for self help groups, so that NABARD can help them for setting up an enterprise.	Information is being provided to such group before organizing training programmes.
				Suggested to release new varieties on paddy suitable to Dakshina Kannada District	Paddy varieties suitable to D.K. are already under farm trial and University will take up action to release the same.

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.	**CEREALS** : Paddy **PULSES** : Black gram, Green gram, Cowpea and Horse gram **OIL SEEDS** : Sesamum **VEGETABLES** : Brinjal, Bhendi, Vegetable cowpea, Ash gourd, Basella, Amarpophilous, Sweet potato and cucumber **FRUITS** : Banana, Pineapple, Jackfruit and Mango **PLANTATION CROPS** : Arecanut, Coconut, Cashew, Pepper, Rubber, Vanilla and cocoa **FLOWER CROPS** : Jasmine **ANIMAL HUSBANDARY** : Dairy, Piggery, Poultry and Fisheries

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

S. No	Agro-climatic Zone	Characteristics
1	Coastal Zone, Zone 10	Krishi Vigyan Kendra, Dakshina Kannada, Kankanady, Mangalore is situated in the Coastal Zone No-10 with an operational area of five Taluks viz., Mangalore, Bantwal, Belthangady, Puttur and Sullya. The total Geographical area of the district is 4866 sq. km. The district has 134246 ha of net cultivable area mainly dependent on rainfall. The annual average rainfall is 3592.8 mm. This district receives rainfall between May and October with heavy rainfall during the month of June, July, and August. Recorded maximum temperature of 34^{o}C during the months of April and May and minimum temperature of 21.5^{o} C during the month of January.

S. No	Agro ecological situation	Characteristics
1	Coastal Zone, Zone 10	The annual average rainfall is 3592.8 mm. This district receives rainfall between May and October with heavy rainfall during the month of June, July, and August. Recorded maximum temperature of 34^{o}C during the months of April and May and minimum temperature of 21.5^{o} C during the month of January. The soil in

		the major portions of the district consists of three types, viz. coastal sands, alluvial, laterite and red loamy soil. Apart from this, coastal saline soil is also noticed in some parts of the district owing to the proximity to sea or backwater. Soils are low in CEC and acidic in condition. The PH of the soil ranges from 4.5 to 5.9 with content of low soluble salt. The major nutrient status of the soil is varying from medium to low. The major crops grown in the districts are Paddy, Arecanut, Coconut, Cashew, Rubber, Pepper, Cocoa and Banana. In some parts of the district pulses like Black gram, Green gram, oilseeds like Sesamum and vegetables like cucumber, Bhendi, Chill, Brinjal bitter gourd, Ash gourd, little gourd and Spinach are grown during Rabi/ Summer season.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Coastal sands, alluvial, Laterite and red loamy soil	Soils are low in CEC and acidic in condition. The PH of the soil ranges from 4.5 to 5.9 with low soluble salt content. The major nutrient status of the soils is varying from medium to low.	1,34,246

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

S. No.	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1.	Paddy	55948	13899.6	2484
2.	Black gram	2111	117.9	558
3.	Cowpea	607	28.9	476
4.	Arecanut	27481	4923.087	179
5.	Coconut	16094	207.180	13
6.	Pepper	2008.31	3600	1827
7.	Cashew	30524	244190	-
8.	Cocoa	906	34480	39406
9.	Vanilla	232.86	8.87	38
10.	Mango	1572.65	1323.155	841
11.	Sapota	184	201.5	1095
12.	Banana	3146.71	606280	193700
13	Pine apple	356.75	2169.2	6080
14	Jack Fruit	996	258960	260000
15	Ginger	313.95	359.344	1145
16	Vegetables	2983	302880	101535
17	Jasmine	66	153	-

* Source: Statistical Department, Dakshina Kannada

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
October	130.2	31.02	24.77	75.29
November	27.4	30.36	24.31	72.63
December	25.2	31.77	20.36	57.64
January	-	33.99	19.81	56.85
February	-	32.80	20.80	64.76
March	1.8	33.36	22.31	77.45
April	-	33.33	25.00	79.00
May	221	34.71	24.79	72.63
June	465.4	31.31	24.33	89.54
July	1525	31.67	24.63	81.32
August	570.8	32.24	23.45	81.53
September	308.8	31.81	23.86	75.66

Source: HRS, Ullal, Mangalore

2.6. Production and productivity of Livestock, poultry, fisheries etc. in the district

Category	Population	Production (No. Meat)	Productivity
Cattle			
Crossbred	107707	908	-
Indigenous	229670	-	-
Buffalo	26069	1151	-
Sheep			
Crossbred	-	-	-
Indigenous	420	-	-
Goats	16487	13368	-
Pigs			
Crossbred	1728	-	-
Indigenous	6263	-	-
Rabbits	566	-	-
Poultry	855976	1287600	-
Category	**Area**	**Production (mt)**	**Productivity**
Fish			
Marine	-	88972	-
Inland	-	1064.53	-
Prawn	-	9119	-

- Source: Statistical Department, Dakshina Kannada

2.6 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Mangalore	-	Puttige	Paddy, Arecanut, Coconut, Pepper, Cashew, Banana, Vegetables, Jasmine	• Imbalanced nutrient application • Non adoption of high yielding Varieties • Soil acidity	• Introduction of high yielding varieties • Organic farming • Integrated Nutrient Management Approaches • Soil reclamation
2.	Bantwal	-	Meramajalu	Paddy, Arecanut, Coconut, Pepper, Banana, Vegetables, Jasmine	• Imbalanced nutrient application • Lack of knowledge on management of pest and diseases • Soil acidity	• Integrated Nutrient Management Approaches • Soil reclamation • Integrated pest management approaches • Employment generation activities • Value addition
3.	Puttur	-	Panaje	Paddy, Arecanut, Coconut, Pepper, Banana, Vegetables, Jasmine, Cashew, Cocoa, Rubber, Vanilla	• Soil acidity • Imbalanced nutrient application • Non adoption of high yielding varieties • Untimely application of pesticides	• Soil reclamation • Introduction of high yielding varieties • Organic farming • Integrated Nutrient Management Approaches • Plant protection

4.	Belthangady	-	Machhina	Paddy, Arecanut, Coconut, Pepper, Banana, Vegetables, Jasmine, Cashew, Cocoa, Rubber, Vanilla	• Imbalanced nutrient application • Soil acidity • Lack of knowledge on management of pest and diseases	• Introduction of high yielding varieties • Organic farming • Integrated Nutrient Management Approaches • Soil reclamation
5.	Sullya	-	Ajjavara	Paddy, Arecanut, Coconut, Pepper, Banana, Vegetables, Jasmine, Cashew, Cocoa, Rubber, Vanilla	• Imbalanced nutrient application • Soil acidity • Lack of knowledge on management of pest and diseases	• Integrated Nutrient Management Approaches • Soil reclamation • Integrated pest management approaches • Employment generation activities • Value addition

2.7 Priority thrust areas

- Integrated nutrient management approaches
- Integrated crop and Pest management approaches
- Soil reclamation
- Introduction of high yielding Varieties
- Rice based cropping system
- Plant Protection
- Weed Management
- Value addition to Agriculture and Horticulture produce
- Employment generation activities
- Water management
- Soil and water conservation
- Organic farming

PART III - TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
05	05	25	25	12	11	84	79

Training				Extension Activities			
3				4			
Number of Courses		Number of Participants		Number of activities		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
46	46	1618	1618	556	556	2760	2760

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
79	79 (Paddy)	1000	1000 (Coconut seedlings)

Livestock (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
170	170	-	-

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

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
													No.	Kg
1.	Nutrient and water management	Paddy	• Poor nutrient management. • Lack of Knowledge on use of RHA which is rich source of P and Silicon.	• Rice hull ash application in paddy. • STCR concept fertilizer in recommendation for paddy • Split application of Potash in paddy	• Integrated crop management in Paddy • SRI Method of paddy cultivation	05	-	-	Field Days-4	79	-	-	-	-
2.	Nutrient management	Arecanut	Poor nutrient management	-	• Nutrient management in Arecanut	02	-	-	-	-	-	-	-	-
3.	Nutrient management	Cashew	No nutrient management	-	• Integrated crop management in Cashew	-	-	-	-	-	-	-	-	-
4.	Crop management	Banana	Poor cultivation practices	-	• Integrated crop management in Banana	-	-	-	-	-	-	-	-	-
5.	Introduction of high yielding of variety	Cassava	Cultivation of local varieties	-	• Cultivation of high yielding varieties of cassava	-	-	-	Field day-1	-	-	-	-	-
6.	Nutrient management	Ash gourd	Poor nutrient management	• Application of Potash in Ash gourd	-	-	-	-	-	-	-	-	-	-
7.	Pest management	Arecanut	Koleroga and root grub	• Management of Inflorescence die back disease in Arecanut	• Management of Koleroga disease in arecanut • Integrated management of root grub in Arecanut	03	01	-	-	-	-	-	-	-
8.	Disease management	Pepper	Quick wilt	-	• Quick wilt management in pepper	-	-	-	-	-	-	-	-	-

9.	Fisheries	Fish	Lack of knowledge in scientific cultivation of fish	-	• Production and performance of stunted fish fingerlings • Introduction of Amur carp in polyculture of fish	05	02	-	Field day-1	-	-	-	-	-

3. B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/ enterprise	No. of programmes conducted			
				OFT	FLD	Training	Field Day
1	2	3	4	5	6	7	8
1.	STCR concept fertilizer recommendation for paddy	UAS, Bangalore	Paddy	03	-	01	-
2.	Rice hull ash application in paddy	UAS, Bangalore	Paddy	05	-	01	01
3.	Split application of Potash in paddy	UAS, Bangalore	Paddy	05	-	01	01
4.	Application of Potash in Ash gourd	UAS, Bangalore	Ash gourd	05	-	01	-
5.	Management of Inflorescence die back in Arecanut	CPCRI, Kasaragod	Arecanut	05	-	-	-
6.	Integrated crop management in Paddy	UAS, Bangalore	Paddy	-	10	02	01
7.	Integrated management of root grub in Arecanut	UAS, Bangalore	Arecanut	-	10	-	-
8.	SRI Method of paddy cultivation	UAS, Bangalore	Paddy	-	05	-	01
9.	Cultivation of high yielding varieties of cassava	CTCRI, Coimbatur	Cassava	-	05	-	01
10.	Management of Koleroga disease in arecanut	UAS, Bangalore	Arecanut	-	06	03	-
11.	Quick wilt management in pepper	UAS, Bangalore	Pepper	-	05	-	-
12.	Integrated crop management in Banana	UAS, Bangalore	Banana	-	05	-	-
13.	Integrated crop management in Cashew	UAS, Bangalore	Cashew	-	10	-	-
14.	Nutrient management in Arecanut	UAS, Bangalore	Arecanut	-	10	02	-
15.	Production and performance of stunted fish fingerlings	UAS, Bangalore	Fisheries	-	10	-	01
16.	Introduction of Amur carp in polyculture of fish	UAS, Bangalore	Fisheries	-	03	-	-

3. B2 contd..

No. of farmers covered															
OFT				FLD				Training				Field Day			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
01	01	01	00	-	-	-	-	16	01	02	01	-	-	-	-
04	00	01	00	-	-	-	-	-	-	-	-	28	00	02	00
03	00	02	00	-	-	-	-	-	-	-	-	22	00	03	00
05	00	00	00	-	-	-	-	12	00	03	00	-	-	-	-
04	00	01	00	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	06	01	02	01	33	20	07	06	11	22	12	08
-	-	-	-	06	02	02	00	-	-	-	-	-	-	-	-
-	-	-	-	03	01	01	00	-	-	-	-	19	01	15	00
				03	00	02	00	-	-	-	-	12	02	04	02
-	-	-	-	05	00	01	00	55	11	08	00	-	-	-	-
-	-	-	-	05	00	00	00	-	-	-	-	-	-	-	-
-	-	-	-	05	00	00	00	-	-	-	-	-	-	-	-
-	-	-	-	09	00	01	00	-	-	-	-	-	-	-	-
-	-	-	-	08	00	02	00	59	17	06	02	-	-	-	-
-	-	-	-	10	00	00	00	-	-	-	-	14	03	14	00
-	-	-	-	03	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	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	03	-	-	-	01	-	-	-	-	04
Varietal Evaluation	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	01	-	01
Small Scale Income Generation Enterprises	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-	-	-	-	-	-
Farm Machineries	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-	-	-	-	-	-
Storage Technique	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Total	**03**	**-**	**-**	**-**	**01**	**-**	**-**	**01**	**-**	**05**

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest Management										
Integrated Crop Management										
Integrated Disease Management										
Small Scale Income Generation Enterprises										

Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total										

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

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

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

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Area (ha)
Integrated Nutrient Management	Paddy	STCR concept fertilizer recommendation for paddy	03	2.0
	Paddy	Rice hull ash application in paddy	05	2.0
	Paddy	Split application of Potash in paddy	05	2.0
	Ash gourd	Application of Potash in Ash gourd	05	2.0
Varietal Evaluation				
Integrated Pest Management				
Integrated Crop Management				
Integrated Disease Management	Arecanut	Management of Inflorescence die back disease in Arecanut	05	5.0
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Value addition				
Drudgery Reduction				
Storage Technique				
Mushroom cultivation				
Total			**23**	**13.0**

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

Thematic areas	Crop	Name of the technology assessed	No. of trials	Area (ha)
Integrated Nutrient Management				
Varietal Evaluation				
Integrated Pest Management				
Integrated Crop Management				

Integrated Disease Management				
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Value addition				
Drudgery Reduction				
Storage Technique				
Mushroom cultivation				
Total				

4. B.3. Technologies assessed under Livestock: Nil

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

4. B. 4. Technologies Refined under Livestock: Nil

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

4. C1. Results of Technologies Assessed

Results of On Farm Trial

1. Use of rice hull ash in paddy cultivation

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment (t/ha)	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy	Rain fed	• Poor nutrient management • Lack of knowledge on use of RHA in paddy cultivation • Leaching loss of nutrient due to heavy rainfall.	Use of rice hull ash in paddy cultivation	05	Use of rice hull ash in paddy cultivation.	Grains/ panicle	T1: 149 T2: 153 T3: 159	T1: 3.79 T2: 4.18 T3: 4.34	• Increased in the yield up to 20% • Less chaffy grains was observed	-	-

Contd..

Technology Assessed		Production (t/ha)	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology option 1 (Farmer's practice)	**T1:** FYM: 2.0 t/ha. 125-150 kg complex fertilizer/ha.	3.79	t/ha	10900.00	1.40
Technology option 2	**T2:** FYM: 5.0 t/ha. N:P:K:: 60:30:45kg/ha.	4.18	t/ha	13800.00	1.49
Technology option 3	**T3:** FYM: 5.0 t/ha, RDF NPK+ 2 tons RHA/ha.	4.34	t/ha	14900.00	1.52

2. Split application of Potassium in Paddy

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment (t/ha)	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy	Rain fed	• Poor nutrient management • Potash deficiency in paddy field • Lack of knowledge on potash management • Leaching loss of Potash due to heavy rainfall.	Split application of Potassium in Paddy	05	Split application of Potassium in Paddy	Grains/ panicle	T1: 157 T2: 166 T3: 169	T1: 4.28 T2: 4.67 T3: 4.84	• Increased in the yield up to 15%. • Farmers appreciated the technology and desired to adopt it.	-	-

Contd..

Technology Assessed		Production (t/ha)	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology option 1 (Farmer's practice)	**T1:** FYM: 2.0 t/ha. 100-125 kg complex fertilizer/ha.	4.28	t/ha	15800	1.58
Technology option 2	**T2:** FYM: 5.0 t/ha. N:P:K:60:30:45 kg/ha (Potassium given in 2 doses – 50% as basal dose and 50% as top dressing after one month along with nitrogen)	4.67	t/ha	18700	1.66
Technology option 3	**T3:** FYM: 5.0 t/ha. N:P:K: 60:30:45 kg/ha (Potassium given in 3 doses – 50% as basal dose and 25% top dressing after one month and remaining during panicle initiation stage)	4.84	t/ha	20200	1.71

3. Soil test based fertilizer recommendation (STCR concept)

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment (t/ha)	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy	Rain fed	• Poor nutrient management • Lack of knowledge on potash management • Leaching loss of Potash due to heavy rainfall.	Soil test based fertilizer recommendation (STCR concept)	03	Soil test based fertilizer recommendation (STCR concept)	Grains/ panicle	T1: 140 T2: 158 T3: 172	T1: 3.52 T2: 4.30 T3: 4.89	• Farmers accepted the technology "The use of fertilizers based on soil test value". • Farmers appreciated the technology and desired to adopt it.	-	-

Contd..

Technology Assessed		Production (t/ha)	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology option 1 (Farmer's practice)	**T1:** FYM: 2.0 t/ha. 100-125 kg complex fertilizer/ha.	3.52	t/ha	8200	1.30
Technology option 2	**T2:** FYM: 5.0 t/ha. N:P:K:: 60:30:45kg/ha.	4.30	t/ha	15000	1.53
Technology option 3	**T3:** Fertilization application based on Soil Test values (STCR concept) with bio- fertilizers and recommended	4.89	t/ha	20400	1.71

	FYM, application of $ZNSO_4$ 20 kg/ha.				

4. Application of Potash in Ash gourd

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment (t/ha)	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Ash gourd	Protective irrigation	Imbalanced Nutrient application resulted in lower yield.	Application of Potash in Ash gourd	5	Potash management in Ashgourd	Wt. of fruit (kg) No. fruits/pl.	4.92 5.32	23.08	Increase in the yield with better keeping quality.	-	-

Contd..

Technology Assessed		Production (t/ha)	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology option 1 (Farmer's practice)	FYM: 5 t/ha.	14.14	t/ha	18260	1.87
Technology option 2	FYM: 12.5 t/ha., 50:50:0 kg NPK/ha.	19.40	t/ha	25684	2.01
Technology option 3	FYM: 12.5 t/ha., 50:50:70 kg NPK/ha.	23.08	t/ha	37376	2.53

5. Management of Inflorescence die back disease in Arecanut

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment (t/ha)	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Arecanut	Rain fed / Protective irrigation	Inflorescence die back is a major disease causes 30-40% yield loss	Management of Inflorescence die back disease in Arecanut	05	Management of Inflorescence die back disease	No. of inflorescence infected/pl % disease incidence Yield(qtl/ha)	0.4 5.0 22.97	2.29	Timely spraying of Zineb 4gm/l. will reduces the disease incidence	-	-

Contd..

Technology Assessed		Production (t/ha)	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology option 1 (Farmer's practice)	• No management as been followed	1.34	t/ha	58160	2.98
Technology option 2	• Spraying of Mancozeb 2.5 gm/ltr. at the time of opening of female flower	1.97	t/ha	95490	3.92
Technology option 3	• Sanitation Spraying of Zineb 4 gm/ltr at the time of opening of female flower	2.29	t/ha	115515	4.41

4. C2. Details of each On Farm Trial to be furnished in the following format separately along with raw data as per the separate proforma provided

1. Use of rice hull ash in paddy cultivation

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	**Use of rice hull ash in paddy cultivation**
2.	Problem Definition	• Poor nutrient management • Lack of knowledge on use of RHA in paddy cultivation Leaching loss of nutrient due to heavy rainfall.
3.	Details of technologies selected for assessment	125-150 kg complex fertilizer/ha. FYM: 5.0 t/ha. N:P:K:: 60:30:45kg/ha. FYM:10 ton/ha, Recomendad Dose of NK + RHA 2 tones/ ha
4.	Source of technology	U.A.S., Bangalore
5.	Production system and thematic area	Rainfed/Protective irrigation and Acidic Soils reclamation, Nutrient Management
6.	Performance of the Technology with performance indicators	Recorded 20% increased in yield compared to farmers practice.
7.	Final recommendation for micro level situation	Application of RHA 2 tones per ha with recommended dose of fertilizer increase the yield and available Phosphorous content in the soil. Hence, technology well suited for coastal acidic soils
8.	Constraints identified and feedback for research	Transportation of Rice hull Ash from the Rice mills involves more expenditure.
9.	Process of farmers participation and their reaction	Farmers appreciated the technology and desired to adopt the same

Raw data about the performance of the Technology assessed with performance indicators (Use of rice hull ash in paddy cultivation)

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed							
			Technology Option 1		Technology Option 2			Technology Option 3		
			Grains /panicle	Yield (Q/ha)	Grains /panicle	Yield (Q./ha)	% increased	Grains /panicle	Yield (Q./ha)	% increased
1.	Ramesh Bhat Bharanya	Panaje	149	37.95	155	42.62	12.3	160	43.77	15.0
2.	Vishnu Bhat	Panaje	151	38.90	153	41.54	6.78	156	42.78	9.38
3.	Balakrishna Bhat	Panaje	148	37.90	155	42.32	11.66	164	45.91	17.0
4.	Madhava Shettigar	Yedapadavu	143	36.90	152	41.75	13.4	158	45.96	18.97
5.	Harishchandra Gorwda	Yedapadavu	153	38.00	150	41.00	7.89	156	43.56	11.84
		Average	**148.8**	**37.93**	**153**	**41.84**	**10.4**	**158.8**	**43.34**	**14.43**

2. Split application of Potassium in Paddy

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	**Split application of Potassium in Paddy**
2.	Problem Definition	• Poor nutrient management • Potash deficiency in paddy field • Lack of knowledge on potash management Leaching loss of Potash due to heavy rainfall.
3.	Details of technologies selected for assessment	FYM: 5.0 t/ha. N:P:K: 60:30:45kg/ha (Potassium given in 2 doses – 50% as basal dose and 50% as top dressing after one month along with nitrogen)
4.	Source of technology	U.A.S., Bangalore
5.	Production system and thematic area	Rainfed/Protective irrigation and Acidic Soils reclamation, Nutrient Management
6.	Performance of the Technology with performance indicators	Recorded 15% increased in yield compared to farmers practice.
7.	Final recommendation for micro level situation	Split application of Potassium in paddy cultivation increase the yield up to 20%. Hence, technology well suited for coastal acidic soils.
8.	Constraints identified and feedback for research	Nil
9.	Process of farmers participation and their reaction	Farmers appreciated the technology and desired to adopt the same

Raw data about the performance of the Technology assessed with performance indicators (Split application of Potassium in Paddy)

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed							
			Technology Option 1		Technology Option 2			Technology Option 3		
			Grains /panicle	Yield (Q/ha)	Grains /panicle	Yield (Q/ha)	% increased	Grains /panicle	Yield (Q/ha)	% increased
1.	Padmanabha Amin	Paladka	166	46.64	171	49.75	6.66	175	51.84	11.14
2.	Bhaskar Poojary	Paladka	164	45.54	167	47.85	5.07	170	49.64	9.00
3.	Gopal Kulal	Paladka	152	38.54	164	44.64	15.82	166	45.75	18.7
4.	Devaki Shetty	Paladka	155	42.84	165	46.84	9.33	169	48.00	12.04
5.	Govinda	Paladka	150	40.84	163	44.76	9.59	164	46.82	14.64
		Average	**157.40**	**42.88**	**166**	**46.76**	**9.29**	**168.8**	**48.41**	**13.14**

3. Soil test based fertilizer recommendation (STCR concept)

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	**Soil test based fertilizer recommendation (STCR concept)**
2.	Problem Definition	• Poor nutrient management • Lack of knowledge on potash management • Leaching loss of Potash due to heavy rainfall.
3.	Details of technologies selected for assessment	FYM: 5.0 t/ha. N:P:K: 60:30:45kg/ha. Fertilization application based on STCR approach with bio-fertilizers and recommended FYM.
4.	Source of technology	U.A.S., Bangalore
5.	Production system and thematic area	Rainfed/Protective irrigation and Acidic Soils reclamation, Nutrient Management
6.	Performance of the Technology with performance indicators	Application of fertilizers based on the soil test values increased in the yield up to 15-20%.
7.	Final recommendation for micro level situation	Application of fertilizers based on the soil test values increased in the yield up to 20%. Hence, it can be recommended for micro level situation.
8.	Constraints identified and feedback for research	• Majority of the farmers applying fertilizer invariably without knowing nutrient status. • There is need to take up more research on STCR concept in coastal zone.
9.	Process of farmers participation and their reaction	Farmers appreciated the technology and desired to adopt the same

Raw data about the performance of the Technology assessed with performance indicators
(Soil test based fertilizer recommendation in Paddy) (STCR concept)

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed							
			Technology Option 1		Technology Option 2			Technology Option 3		
			Grains /panicle	Yield (Q/ha)	Grains /panicle	Yield (Q/ha)	% increased	Grains /panicle	Yield (Q/ha)	% increased
1.	Chandravathi	Molebettu	148	37.8	153	40.84	8.04	167	46.85	23.94
2.	M. Narayana Bhat	Molebettu	139	34.15	157	42.34	23.98	172	48.64	42.43
3.	Lorence D'souza	Molebettu	132	33.8	165	45.84	25.62	177	51.34	51.89
		Average	**139.66**	**35.25**	**158.33**	**43.00**	**19.21**	**172**	**48.94**	**39.42**

4. Nutrient Management in Ash gourd

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	**Nutrient Management in Ash gourd**
2.	Problem Definition	Imbalanced Nutrient application resulted in lower yield.
3.	Details of technologies selected for assessment	FYM : 12.5 t/ha 50:50:70 kg NPK/ha
4.	Source of technology	ZARS, Brahmavar
5.	Production system and thematic area	Protective irrigation, nutrient management
6.	Performance of the Technology with performance indicators	18.96 % increase in the yield over technology assessment
7.	Final recommendation for micro level situation	Application of 70 kg /ha of potash along with Recommended dose of fertilizer will enhance the yield with good keeping quality. Hence, this technology is suitable to micro level situation
8.	Constraints identified and feedback for research	Leaching loss of nutrients
9.	Process of farmers participation and their reaction	Farmers have actively participated in implementation and evaluation of the technology. They have been convinced that application of potash as a nutrient source along with the recommended dose of fertilizers results in higher yield with better keeping quality. Farmers agreed to adopt and disseminate the same technology to neighboring farmers.

Raw data about the performance of the Technology assessed with performance indicators

(Nutriment Management in Ash gourd)

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed								
			Technology Option 1			Technology Option 2			Technology Option 3		
			Wt. of fruit (kg)	No. of fruits / plant	Yield (ton /ha)	Wt. of fruit	No. of fruits / plant	Yield (ton /ha)	Wt. of fruit	No. of fruits / plant	Yield (ton /ha)
1.	Alex Rodrigous	Kariyala	3.3	3.0	12.10	3.6	4.0	15.00	4.4	4.8	20.30
2.	Filomina Rodrigous	Kariyala	3.60	3.5	13.50	3.8	4.4	20.00	5.0	5.30	22.0
3.	Bhoja Kundar	Polali	3.55	4.0	17.1	3.7	4.8	23.00	4.80	6.0	27.5
4.	Chadrashekar Rao	Polali	3.90	3.85	15.0	4.2	4.6	21.00	5.30	5.40	24.6
5.	Krishna Holla	Polali	3.85	3.40	13.0	4.6	4.2	18.00	5.10	5.10	21.0
		Average	**3.64**	**3.55**	**14.14**	**3.86**	**4.4**	**19.40**	**4.92**	**5.32**	**23.08**

5. Management of Inflorescence die back disease in Arecanut

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	**Management of Inflorescence die back disease in Arecanut**
2.	Problem Definition	Inflorescence die back is a major disease which causes 30-40% yield loss
3.	Details of technologies selected for assessment	• Sanitation Spraying of Zineb 4 gm/ltr at the time of opening of female flower
4.	Source of technology	CPCRI, Kasaragod
5.	Production system and thematic area	Rainfed/Protective irrigation and disease Management
6.	Performance of the Technology with performance indicators	Removal of infected debris and timely spraying of Zineb 4gm/ltr. will reduce the disease incidence, nut dropping and increases the yield.
7.	Final recommendation for micro level situation	Removal of disease infected inflorescence and spraying of Zineb 4gm/l. at the time of opening of female flower found effective in management of the disease.
8.	Constraints identified and feedback for research	Nil
9.	Process of farmers participation and their reaction	Farmers express the happiness about the demonstrated technology and there was low disease incidence observed when compared to traditional practice.

Raw data about the performance of the Technology assessed with performance indicators

(Management of Inflorescence die back disease in Arecanut)

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed								
			Technology Option 1			Technology Option 2			Technology Option 3		
			No. of Inflorescence infected /pl	% Disease incidence	Yield (t./ha)	No. of Inflorescence infected /pl	% Disease incidence	Yield (t./ha)	No. of Inflorescence infected/pl	% Disease incidence	Yield (t./ha)
1.	Chandrashekhar Gatty	Kondana	04	50	1.12	02	25	1.82	01	12.5	2.08
2.	Prabhakara Mayya	Nada	03	37.5	1.43	01	12.5	2.08	00	00	2.35
3.	Ramesh Bhat Bharanya	Panaje	03	37.5	1.2	01	12.5	2.06	00	00	2.20
4.	Ajith Kumar Shetty	Arkula	03	37.5	1.59	01	12.5	1.93	00	00	2.58
5.	Shashidhar Hebbar	Mundoor pady	04	50	1.37	01	12.5	1.95	01	12.5	2.26
		Average	**3.4**	**42.5**	**1.34**	**1.2**	**15.0**	**1.97**	**0.4**	**5.0**	**2.29**

4. D1. Results of Technologies Refined: Nil

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 refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12

Contd..

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

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

1 Title of Technology Refined

2 Problem Definition

3 Details of technologies selected for assessment/refinement

4 Source of technology

5 Production system and thematic area

6 Performance of the Technology with performance indicators

7 Final recommendation for micro level situation

8 Constraints identified and feedback for research

9 Process of farmers participation and their reaction

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2008-09

Sl. No	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
1	Oilseeds	Rainfed with protective irrigation	Rabi/summer	Sesamum	Navile-1	-	Residual moisture utilization	Production technology	5.0	5.0	05	10	15	-
2	Pulses	Rainfed with protective irrigation	Rabi/summer	Black gram	TAU-9	-	Residual moisture utilization	Production technology	10.0	10.0	10	15	25	-
		Rainfed with protective irrigation	Rabi/summer	Green gram	Rashmi	-	Residual moisture utilization	Production technology	5.0	5.0	03	08	11	-
3	Cereals	Rainfed	Rabi	Paddy	MO-4	-	Water management	SRI Method of Paddy cultivation	5.0	5.0	02	03	05	-
		Rainfed	Kharif	Paddy	MO-4	-	Nutrient management	Integrated Crop Management in Paddy	5.0	5.0	01	04	05	-
4	Millets													
5	Vegetables	Protective irrigation	Rabi-2008	Cassava	Sree Vijaya		Introduction of new variety	Cultivation of high yielding varieties of Cassava	0.1	0.1	02	03	05	-
6	Flowers													
7	Ornamental													

8	Fruit	Rainfed/ protective irrigation	Rabi-2008	Banana	G-9	-	Crop management	Integrated crop management in Banana	1.0	1.0	01	04	05	-
9	Spices and condiments	Rainfed /protective irrigation	Kharif -2008	Pepper	Paniyur	-	Disease management	Quick wilt management in pepper	500 vines	500 vines	01	04	05	-
10	Commercial													
11	Medicinal and aromatic													
12	Fodder													
13	Plantation	Rainfed/ protective irrigation	Rabi-2008	Arecanut	-	Mangala	Nutrient management	Nutrient management in Arecanut	2.0	2.0	03	07	10	-
		Rainfed/ protective irrigation	Rabi-2008	Cashew	Ullal-1	-	Crop management	Integrated crop management in Cashew	2.0	2.0	02	08	10	-
		Rainfed/ protective irrigation	Kharif - 2008	Arecanut	-	Mangala	Disease management	Koleroga management in Arecanut	2.5	2.5	01	05	06	-
		Rainfed/ protective irrigation	Kharif - 2008	Arecanut	D.K. local	Mangala	Insect management	Integrated management of root grub in Arecanut	2.0	2.0	02	08	10	-
14	Fibre													
15	Dairy													
16	Poultry													

17	Rabbitry													
18	Pigerry													
19	Sheep and goat													
20	Duckery													
21	Common carps													
22	Mussels													
23	Ornamental fishes													
24	Oyster mushroom													
25	Button mushroom													
26	Vermicom post													
27	Sericulture													
28	Apiculture													
29	Implements													

30	Fisheries	Rainfed	Kharif/Rabi	Fish	Catla, Rohu & Mrigal	-	Growth and survival the performance of stunted fish fingerlings	Production and performance of stunted fish fingerlings	1.0	1.0	-	10	10	-
		Rainfed	Kharif/Rabi	Fish	Catla, Rohu & Amur carp (Chakri)		Growth and survival performance of Amur carp	Introduction of Amur carp in poly culture of fish	0.3	0.3	-	03	03	-

5. A. 1. Soil fertility status of FLDs plots during 2008-09

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
1	Oilseeds	Rainfed/ protective irrigation	Rabi/summer 2008-09	Sesamum	Navile-1	-	Utilization of Residual moisture	Production technology	Rabi/summer 2008-09	M	H	M	Paddy
2	Pulses	Rainfed /protective irrigation	Rabi/summer 2008-09	Black gram	TAU-9	-	Utilization of Residual moisture	Production technology	Rabi/summer 2008-09	M	M	M	Paddy
		Rainfed /protective irrigation	Rabi/summer 2008-09	Green gram	Rashmi	-	Residual moisture utilization	Production technology	Rabi/summer 2008-09	M	M	L	Paddy
3	Cereals	Rainfed	Kharif-2008-09	Paddy	MO-4	-	Water management	SRI-Method of Paddy cultivation	Kharif-2008-09	M	H	L	Paddy
		Rainfed	Kharif-2008-09	Paddy	MO-4	-	Nutrient management in paddy	Integrated Crop Management in Paddy	Kharif-2008-09	M	M	L	Paddy
4	Millets												
5	Vegetables	Protective irrigation	Rabi-2008	Cassava	Sree Vijaya	-	Introduction of new variety	Cultivation of high yielding variety of cassava	Rabi-2008	M	M	L	Bhendi

6	Flowers												
7	Ornamental												
8	Fruit	Protective irrigation	Rabi-2008	Banana	G-9	-	Crop management	Integrated crop management in Banana	Rabi-2008	M	M	L	Black gram
9	Spices and condiments	Rainfed/protectiv irrigation	Kharif-2008	Pepper	Paniyur	-	Disease management	Quick wilt management in pepper	Kharif-2008	M	L	L	-
10	Commercial												
11	Medicinal and aromatic												
12	Fodder												
13	Plantation	Rainfed/ protective irrigation	Rabi-2008	Arecanut	-	Mangala	Nutrient management	Nutrient management in Arecanut	Rabi-2008	M	M	L	-
		Rainfed	Rabi-2008	Cashew	Ullal-1	-	Crop management	Integrated crop management in cashew	Rabi-2008	M	M	L	-
		Rainfed/ protective irrigation	Kharif-2008	Arecanut	-	Mangala	Disease management	Koleroga management in Arecanut	Kharif-2008	M	M	L	-
		Rainfed/ protective irrigation	Kharif-2008	Arecanut	D.K. local	Mangala	Insect management	Integrated management of root grub in Arecanut	Kharif - 2008	M	M	L	-
14	Fibre												

* H = High, * M = Medium, * L = Low

5. B. Results of Frontline Demonstrations

5. B.1. Oilseeds:

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Sesamum	Introduction of high yield variety of oilseeds	Navile-1	-	-	15	5.0	2.86	1.25	2.75	1.95	41.02	6000	14400	8400	2.4	6500	10210	3710	1.57
	Total				**15**	**5.0**													

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
No. of Pods/plant	32 pods/plant	12 pods/plant

5.B.2. Pulses

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Black gram	Black gram production technology	TAU-9	-	Rainfed	25	10.0	3.10	1.76	4.86	3.81	27.55	7500	18375	10875	2.45	7000	14477	7477	2.06
Green gram	Green gram production technology	Rashmi	-	Rainfed	11	5.0	1.76	1.20	2.15	1.75	22.85	5500	10120	4620	1.84	5000	8750	3750	1.75
	Total				**36**	**15.0**													

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Black gram		
No. of Pods/plant	25 pods/plant	12 pods/plant
Green gram		
No. of Pods/plant	18 pods/plant	10 pods/plant

5. B. 3. Other crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Cereals																			
Paddy	SRI-Method of Paddy cultivation	MO-4		Rainfed	05	2.0	50.64	40.65	48.40	34.98	38.36	24000	52800	28800	2.2	23000	35880	12881	1.56
	Integrated Crop Management in Paddy	MO-4		Rainfed	05	2.0	53.84	48.64	51.14	35.41	44.42	25000	48250	23250	1.93	23000	32200	9200	1.40
Millets																			
Vegetables																			
Cassava	Cultivation of high yielding variety of Cassava	Sree Vijaya	-	Rainfed/ protective irrigation	05	0.1	340	290	325	250	23	23000	97500	74500	4.2	19200	56000	36800	2.9
Flowers																			
Ornamental																			
Fruit																			
Banana	Integrated crop management in Banana	G-9	-	Rainfed/ protective irrigation	05	1.0	436	280	396	263.1	50.5	53825	237600	183775	4.41	48618	157860	109242	3.24
Spices and condiments																			
Pepper	Quick wilt management in Pepper	Paniyur	-	Rainfed/ Protective irrigation	05	500 vines	6.79	3.43	5.32	2.98	78.52	28360	61180	32820	2.15	25324	34200	8876	1.35
Commercial																			
Medicinal and aromatic																			
Fodder																			
Plantation																			

Arecanut	Nutrient management in Arecanut	-	Mangala	Rainfed/ Protective irrigation	10	2.0	29.7	18.3	26.4	18.60	41.93	34970	171600	136630	4.9	33870	120900	87030	3.56
Cashew	Integrated crop management in Cashew	Ullal -1	-	Rainfed/ Protective irrigation	10	2.0	16.20	11.10	12.21	6.2	96.93	12135	36630	24495	3.0	9980	18600	8620	1.86
Arecanut	Koleroga management in Arecanut	-	Mangala	Rainfed/ Protective irrigation	06	2.5	31.83	26.68	29.32	23.11	26.87	38660	190580	151920	4.92	37690	109393	71640	2.90
Arecanut	Integrated root grub management in Arecanut	D.K. local	Mangala	Rainfed/ Protective irrigation	10	2.0	12.56	6.34	9.21	5.7	61.57	32030	64470	32440	2.0	31267	39900	8633	1.27
Fibre																			
Others (pl.specify)																			

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Cereals:		
SRI-Method of Paddy cultivation		
Grains/panicle	174.4	144.4
Tillers/plant	36.2	12.2
Integrated Crop Management in Paddy		
Grains/panicle	179	144
Tillers/plant	30	13.0
Vegetables:		
Cultivation of high yielding variety of Cassava		
t/ha.	30	15
Ornamental		
Integrated crop management in Banana		
Bunch weight (Kg.)	28	22
Spices and condiments		
Quick wilt management in Pepper		
% disease incidence	23	76

Plantation		
Nutrient management in Arecanut		
No. of Nut drops/plant	6.60	15.50
Integrated crop management in Cashew		
No. of nuts / kg.	149.3	114
Koleroga management in Arecanut		
No. of bunches in infected /plant	0.8	2.1
Integrated root grub management in Arecanut		
No. of bunches/plant	4.2	1.4

5.B.4. Livestock: Nil

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

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

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

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

5. B. 5. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m^2)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Common carps																	
Mussels																	
Ornamental fishes																	
Others																	
Catla, Rohu & Mrigal	Production and performance of stunted fish fingerlings	Catla, Rohu & Mrigal	10	10	31.75	22.62	25.87	17.50	47.83	56250	129350	73100	2.30	48150	87500	39350	1.82
Catla, Rohu & Amur carp	Introduction of Amur carp in poly culture of fish	Catla, Rohu & Amur carp	03	03	37.65	32.47	34.28	18.50	85.30	57590	143970	86380	2.50	46500	77700	31200	1.67

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Production and performance of stunted fish fingerlings		
% Survival	50.25	42.86
Introduction of Amur carp in poly culture of fish		
% Survival	57.17	46.14

5. B.6. Other enterprises: Nil

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area (m^2}	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST, H-High L-Low, A-Average

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

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

5. B.7. Farm implements and machinery: Nil

Name of the implement	Name of the technology demonstrated	No. of Demo	Units/ Area (m^2}	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
				Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
				H	L	A										

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST H-High L-Low, A-Average

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

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

5.B.8. Cotton: Nil

Summary of demonstrations conducted under FLD cotton

Sl. No.	Category	Technology Demonstrated	Variety	Hybrid	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
	Production Technology										
	IPM										
	Farm Implements										

Production technology demonstrations

Performance of demonstrations

Farming situation	Technology Demonstrated	Area (ha)	No. of demo.	Variety	Hybrid	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
						Demo	Local		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 2008-09 : Nil

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

Integrated pest management demonstrations: Nil

Farming situation	Variety	Hybrid	No. of blocks	Total No. of Demo.	Area (ha)	Incidence of pest and diseases (%)			Seed Cotton Yield (q/ha)			Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
						IPM	Non IPM	% Change	IPM	Non IPM	% Change	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

Demonstrations on farm implements: Nil

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

Extension Programmes organized in Cotton Demonstration Plots: Nil

Extension activity	No. of Programmes	Participants			SC/ST		
		Male	Female	Total	Male	Female	Total
Consultancy							
Conventions							
Demonstrations							
Diagnostic surveys							
Exhibition							
Farmer study tours							
Farmers Field school							
Field Days							
Field visits							
Gram sabha							
Group discussions							
Kisan Gosthi							
Kisan Mela							
Training for Extension Functionaries							
Training for farmers							
Viedo show							
Newspaper coverage							
Popular articles							
Publication							
Radio talks							
T.V. Programme							
Others (Pl.specify)							
TOTAL							

Technical Feedback on the demonstrated technologies on all crops / enterprise

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1.	Sesamum	Production technology	The introduced variety (Navile-1) performed better in yield than the local variety.
2.	Black gram	Production technology	The introduced variety (TAU-9) black gram performed better in pod yield than the local variety.
3.	Green gram	Production technology	The introduced variety (Rashmi) performed slightly better in yield than the local variety.
4.	Paddy	SRI-Method of Paddy cultivation	Under SRI method of paddy cultivation grain and straw yield are better than the traditional method. Recorded higher number of tillers in SRI method which resulted in higher yield with water savings than the normal method of paddy cultivation.
5.	Paddy	Integrated Crop Management in Paddy	Adoption of ICM practices gave higher yield over traditional method. In long run ICM practice will help to maintain the soil health and sustained the yield.
6.	Arecanut	Integrated root grub management in Arecanut	Timely application of Phorate 25 gm/plant during May-June and drenching of Chloropyriphos 5ml/ltr. (2-3ltr/plant) during September reduced root grub incidence and increase the vigour of the plant
7	Fisheries	Production and performance of stunted fish fingerlings	Stocking of stunted fingerlings in the farm ponds and irrigation tanks recorded 2-3 times higher yield and survival compared to normal fish fingerlings.
8	Fisheries	Introduction of Amur carp in poly culture of fish	Use of Amur carp in place of normal common carp recorded in higher yield due to higher somatic growth.

Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Sesamum	Production technology	Farmers felt that the new variety Navile-1 and scientific cultivation practices has increased the yield of Sesamum over the local variety and traditional methods. Farmers agreed to adopt the variety and cultivation practices and disseminate the same to the neighbouring farmers.
2	Black gram	Production technology	Farmers felt the scientific cultivation of black gram can increase the yield over traditional method. Further the farmer willing to continue the scientific cultivation practices in black gram in future.
3	Green gram	Production technology	Farmers felt the scientific cultivation of green gram can increase the yield over traditional method. Further the farmer willing to continue the scientific cultivation practices in green gram in future.
4	Paddy	SRI-Method of Paddy cultivation	Farmers felt that the yield in SRI-method of paddy cultivation is better over traditional practice. Experienced labour and weed management is major problem in this method, which can be over come by use of conoweeder. The farmers are willing to adopt it and agree to disseminate the same to the neighbouring farmers.
5	Paddy	Integrated Crop Management in Paddy	Farmers felt the ICM technology in paddy cultivation has helped to increase the grain and straw yield. Farmers wish to continue the same technology in future and disseminate it to the neighbouring farmers.
6	Arecanut	Integrated root grub management in Arecanut	Farmers opined that timely application of Phorate and Chloropyriphos reduced root grub incidence and plant may regain the vigour and yield.
7	Fisheries	Production and performance of stunted fish fingerlings	Farmers appreciated the growth and survival of stunted fish fingerlings.
	Fisheries	Introduction of Amur carp in poly culture of fish	The growth performance of Amur carp was highly appreciated by the farmer as it matures later.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	06	194	-
2	Farmers Training	03	90	-
3	Training for extension functionaries	-	-	-

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids: Nil

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Units/ Area (m^2)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Cereals																	
Bajra																	
Maize																	
Rice																	
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
Others (pl.specify)																	
Total																	
Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
Others (pl.specify)																	
Total																	
Vegetable crops																	
Bottle gourd																	
Capsicum																	
Others (pl.specify)																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total																	

H-High L-Low, A-Average

PART VII. TRAINING

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	01	27	00	27	02	00	02	29	00	29
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Mechanization	01	25	00	25	02	00	02	27	00	27
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	01	19	15	34	03	02	05	22	17	39
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										

Export potential of ornamental plants										
Propagation techniques of Ornamental Plants	01	06	08	14	01	00	01	07	08	15
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	01	14	10	24	08	02	10	22	12	34
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	04	11	138	149	00	13	13	11	151	162
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming	01	14	02	16	00	00	00	14	02	16
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture	01	35	03	38	08	00	08	43	03	46
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										

Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**11**	**151**	**176**	**327**	**24**	**17**	**41**	**175**	**193**	**368**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	02	32	14	46	05	00	05	37	14	51
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										

Nursery management	01	49	13	62	05	02	07	54	15	69
Integrated Crop Management	01	23	03	26	02	02	04	25	05	30
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs	02	43	05	48	20	08	28	63	13	76
Mechanization	01	25	09	34	03	01	04	28	10	38
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants	01	44	00	44	04	00	04	48	00	48
Others (pl.specify)										
d) Plantation crops										
Production and Management technology	02	59	17	76	06	02	08	65	19	84
Processing and value addition										
Mechanization	01	32	00	32	03	00	03	35	00	35
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										

Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management	01	53	0	53	25	0	25	78	0	78
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing	01	14	02	16	04	00	04	18	02	20
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	02	58	18	76	09	03	12	67	21	88
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	03	32	56	88	03	02	05	35	58	93
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	03	18	89	107	03	05	08	21	94	115
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										

Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management										
Integrated Disease Management	03	55	11	66	08	00	08	63	11	74
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming	01	21	14	35	05	00	05	26	14	40
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture	02	25	23	48	02	02	04	27	25	52
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										

Mushroom production										
Apiculture										
Others (pl.specify)										
Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**27**	**583**	**274**	**857**	**107**	**27**	**134**	**690**	**301**	**991**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	01	19	12	31	02	00	02	21	12	33
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										

Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	01	19	12	31	02	00	02	21	12	33

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	01	00	31	31	00	05	05	00	36	36
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										

Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture	01	19	02	21	03	00	03	22	02	24
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Integrated disease management	01	22	00	22	04	00	04	26	00	26
Integrated Pest management	01	30	17	47	09	02	11	39	19	58
TOTAL	**04**	**71**	**50**	**121**	**16**	**07**	**23**	**87**	**57**	**144**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing	01	00	23	23	00	03	03	00	26	26
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Integrated farming	01	00	37	37	00	03	03	00	40	40
Total	**02**	**00**	**60**	**60**	**00**	**06**	**06**	**00**	**66**	**66**

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

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

7.G. Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**										
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management	01	14	02	16	00	00	00	14	02	16
10.e.	Others (pl.specify)										
11.	**Home Science**										

11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Total	01	14	02	16	00	00	00	14	02	16

Details of sponsoring agencies involved

1. National Fisheries Development Board, Hyderabad

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

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

Farmers Field School on Integrated Pest Management in Paddy

Sl. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	FFS concept, Ballot Box test (Pre-test)	1	20	4	24	0	1	1	20	5	25
2.	Seed treatment and land preparation	1	20	4	24	0	1	1	20	5	25
3.	Pest management and AESA-I	1	20	4	24	0	1	1	20	5	25
4.	Disease Management and AESA-II	1	20	4	24	0	1	1	20	5	25
5.	Field Day on Integrated Pest Management in Paddy	1	20	4	24	0	1	1	20	5	25
6.	Post test and withdrawn programme	1	20	4	24	0	1	1	20	5	25

Farmers Field School Results

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Paddy	Integrated Pest Management in Paddy	Jaya	-	Rainfed	01	0.8	-	-	37.50	28.75	30.43	18950	37750	14800	1.78	21000	25875	4875	1.23
	Total				**01**	**0.8**													

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Grains/panicle	175	140
No. of Tillers/plant	30	14

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including activities of FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	07	150	26	176	52	10	62	06	02	08
Kisan Mela	-	-	-	-	-	-	-	-	-	-
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Exhibition	-	-	-	-	-	-	-	-	-	-
Film Show	-	-	-	-	-	-	-	-	-	-
Method Demonstrations	19	271	300	571	34	24	58	06	03	09
Farmers Seminar	02	212	193	405	02	00	02	12	09	21
Workshop	-	-	-	-	-	-	-	-	-	-
Group meetings	-	-	-	-	-	-	-	-	-	-
Lectures delivered as resource persons	44	550	115	665	18	06	24	5	8	13
Newspaper coverage	70	-	-	-	-	-	-	-	-	-
Radio talks	10	-	-	-	-	-	-	-	-	-
TV talks	-	-	-	-	-	-	-	-	-	-
Popular articles	17	-	-	-	-	-	-	-	-	-
Extension Literature	04	-	-	-	-	-	-	-	-	-
Advisory Services	134	98	12	110	09	06	15	03	06	09
Scientific visit to farmers field	71	75	06	81	11	06	17	05	03	08
Farmers visit to KVK	174	128	11	139	23	06	29	04	02	06
Diagnostic visits	-	-	-	-	-	-	-	-	-	-
Exposure visits	-	-	-	-	-	-	-	-	-	-
Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-
Soil health Camp	-	-	-	-	-	-	-	-	-	-
Animal Health Camp	-	-	-	-	-	-	-	-	-	-
Agri mobile clinic	-	-	-	-	-	-	-	-	-	-
Soil test campaigns	01	14	02	16	04	00	04	00	00	00
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-	-	-	-
Celebration of important days (specify)	-	-	-	-	-	-	-	-	-	-
World Food Day	01	18	11	29	02	02	04	00	00	00
Farmers, Scientists and Officers interaction	01	30	02	32	06	00	06	00	00	00
World Environmental Day	01	22	02	24	01	00	01	00	00	00
Farmers Day	01	31	13	44	04	02	06	00	00	00
Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
Total	**556**	**1599**	**693**	**2292**	**166**	**62**	**228**	**155**	**65**	**220**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9. A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals	Paddy	MO-4	-	59.50	63054.00*	15 Farmers
Oilseeds	-	-	-	-	-	-
Pulses	-	-	-	-	-	-
Commercial crops	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others (specify)	-	-	-	-	-	-
Total	**-**	**-**	**-**	**79**	**63200.00**	**-**

*** Note:**

- 5.06 qtl sold as TL Seed @ Rs. 19.00/Kg.
- Remaining 5.34 qtl sold as bulk @ Rs.10.00/ Kg.

9. B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial	-	-	-	-	-	-
Vegetable seedlings	Drumstick	PKM-1	-	190	1900.00	45
Fruits	Papaya	Taiwan red lady	-	225	3375.00	40
Ornamental plants	-	-	-	-	-	-
Medicinal and Aromatic	-	-	-	-	-	-
Plantation	Coconut	West coast tall, Chowghat dwarf	-	850	29750.00	60
Spices	-	-	-	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings		-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others(specify)		-	-	-	-	-
Total	**-**	**-**	**-**	**1265**	**35025.00**	**145**

9. C. Production of Bio-Products: Nil

Bio Products	Name of the bio-product	Quantity		Value (Rs.)	Number of farmers to whom provided
		No	Kg		
Bio Fertilizers	-	-	-	-	-
Bio-pesticide	-	-	-	-	-
Bio-fungicide	-	-	-	-	-
Bio Agents	-	-	-	-	-
Others (specify)	-	-	-	-	-
Total	-	-	-	-	-

9. D. Production of livestock materials:

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals	-	-	-	-
Cows	-	-	-	-
Buffaloes	-	-	-	-
Calves	-	-	-	-
Others (Pl. specify)	-	-	-	-
Poultry	-	-	-	-
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-
Emu	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
Piggery	-	-	-	-
Piglet	-	-	-	-
Others (Pl.specify)	-	-	-	-
Fisheries	-	-	-	-
Fingerlings	-	-	-	-
Ornamental Fish	Guppi, Platy, Swordtain and Molly	170	800.00	1
Total		**170**	**800.00**	**1**

PART X – PUBLICATION, SUCCESS STORY, SWTL

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

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

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	-	--	-
Technical reports	-	-	-
News letters	Krishi Sanjeevini (Quarterly)	Dr. H Hanumanthappa	100
Technical bulletins	-	-	-
Popular articles	• Krishi Vigyan Kendra-A ray of hope	Dr. G. Nagesha	01
	• Balanced food	Dr. Jayashree. S	01
	• Value addition to food grains	Dr. Jayashree. S	01
	• Health benefits of Leafy vegetables	Dr. Jayashree. S	01
	• Minerals for good health	Dr. Jayashree. S	01
	• Health and food -Why do we need vitamins?	Dr. Jayashree	01
	• Information technology in Agriculture	Dr. G. Nagesha	01
	• Jack of all fruits	Dr. Jayashree. S	01
	• Processing and preservation of fruits	Dr. Jayashree. S	01
	• Babycorn - An alternative crop in coastal zone	Dr. Parashuram Chandravanshi	01
	• Its Right time for soil sampling and testing in coastal zone	Dr. Parashuram Chandravanshi	01
	• Important activities to be carried out by the farmers during pre monsoon	Dr. Parashuram Chandravanshi	01
	• Koleroga management in Arecanut	Mr. Veerendra kumar K.V	01
	• Root grub management in Arecanut	Mr. Veerendra kumar K.V	01
	• Utilization of seasonal water bodies for fish culture	Dr. Rajesh K.M	01
	• Integrated fish farming	Dr. Rajesh K.M	01

	• Potassium and Boron management in Arecanut	Dr. Parashuram Chandravanshi	01
Extension literature	• Improved cultivation practices of Sesamum in coastal zone	Dr. Parashuram Chandravanshi	200
	• Improved cultivation practices of green gram in coastal zone	Dr. Parashuram Chandravanshi	350
	• Improved fish and prawn culture	Dr. Rajesh K.M	50
	• Composite fish culture	Dr. Rajesh K.M	50
TOTAL			

10. B. Details of Electronic Media Produced: Nil

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

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

The Broad outline for the case study may be

Title

Background

Interventions
- Process
- Technology

Impact
- Horizontal Spread
- Economic gains
- Employment Generation

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

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Paddy	Spraying of plant extract like Neem, Eupatorium	To prevent insects and disease incidence
2.	Coconut	Attraction of Rhinoceros beetle in coconut garden by placing mixture made up of ground nut cake and cow dung.	Attraction of Rhinoceros beetle
3.	Ash gourd/Cucumber	Hanging of Ash gourd/ cucumber	To improve the shelf life

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

- **Identification of courses for farmers/farm women** : PRA/Discussion meetings/Focus group discussion/Group meetings
- **Rural Youth** : PRA/Discussion meetings/Focus group discussion/Group meetings
- **In-service personnel** : PRA/Discussion meetings/Focus group discussion/Group meetings

Tools and methodology followed are

1. Focus group discussion
2. Media coverage
3. Farmers response
4. Pre and Post evaluation tests
5. Suggestion box
6. Method demonstration

10.G. Field activities

i.	Number of villages adopted	:	05
ii.	No. of farm families selected	:	50
iii.	No. of survey/PRA conducted	:	10

10.H. Activities of Soil and Water Testing Laboratory: Nil

Status of establishment of Lab :

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

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

Details of samples analyzed so far since establishment of SWTL including during 2008-09 :

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

Details of samples analyzed during 2008-09 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Plant samples				
Total				

ART XII IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Mushroom Cultivation	33	25	6300.00	12000.00

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

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

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

1. Impact analysis of KVK activities

METHODOLOGY

Krishi Vigyan Kendra had organized On Campus training programme for seven days on Integrated farming technologies for practicing farmers of Dakshina Kannada district for which the impact analysis was done on knowledge gain. The total samples selected for the study were 40 trainees. The technologies selected for the training were eight in number viz. Jasmine production technology, Paddy Production technology, Arecanut cultivation technology, Coconut cultivation technology, cashew and banana cultivation technology, Vermicompost preparation technology, Dairy and fishery and value addition to agricultural and horticultural produce technologies. Data was collected from the trainees with the help of a structured schedule before and after the training programme to assess the gain in knowledge towards selected technologies. Data was further analyzed for Knowledge index of trainees.

$$\text{Knowledge Index} = \frac{\text{Knowledge score obtained}}{\text{Maximum Knowledge score}} \times 100$$

RESULTS

Table 1 Socio-economic characteristics of the trainees

Variable	Characteristics	No. of respondents	Percentage
Age	Young (≤ 35)	35	87.50
	Middle (36-50)	5	12.50
	Old (> 50)	0	0
Education	Illiterate	0	0
	Primary school	8	20.00
	High School	12	30.00
	Pre-University College	20	50.00
	Graduate	0	0
Family size	Small family (≤ 5)	12	30.00
	Large family (> 5)	28	70.00
Family type	Nuclear family	10	25.00
	Joint family	30	75.00
Land holding	Marginal farmers	26	65.00
	Small farmers	10	25.00
	Medium farmers	4	10.00
	Large farmers	0	0

Table 1 clearly shows that more than three fourth of the trainees (87.50 %) were young followed by middle aged. With reference to education half of the trainees had pre-University college education followed by high school and primary school education. More than half of the trainees belong to the families having more than 5 family members i.e. large and joint family. More than half of the trainees were marginal farmers having land area less than 2.5 acres followed by small (25 %) and medium farmers (10%). Table 1 clearly indicates that majority of the trainees were young, sufficiently educated, came from joint and large families and practicing agriculture and allied activities.

Table 2 Knowledge level of trainees on various agriculture and allied technologies

Topic	Knowledge level of trainees				No. of trainees gained knowledge due to training	
	Before	%	After	%	Difference	%
Arecanut cultivation	9	22.50	30	75.00	**21**	**52.50**
Paddy cultivation	16	40.00	29	72.50	13	32.50
Jasmine cultivation	9	22.50	26	65.00	**17**	**42.50**
Coconut cultivation	17	42.50	23	57.50	6	15.00
Cashew and banana cultivation	21	52.50	29	72.50	8	20.00
Vermicompost preparation	10	25.00	24	60.00	**14**	**35.00**

Dairy and fishery	20	50.00	31	77.50	11	27.50
Value addition to agricultural and horticultural produce	17	42.50	21	52.50	4	10.00
Knowledge Index	**33.35 %**		**65.75 %**			

Table 3 Ranking of the demonstrated technologies

Sl. No.	Technologies	Rank	Reasons
1.	Arecanut cultivation	I	Actively involved in areca nut cultivation
2.	Jasmine cultivation	II	Interest in Jasmine cultivation
3.	Vermicompost preparation	III	Organic farming
4.	Paddy cultivation	IV	Income generating and provides food
5.	Dairy and Fishery	V	Interest in dairy farming
6.	Cashew and Banana cultivation	VI	Felt cashew as neglected crop which does not need management
7.	Coconut cultivation	VII	Less income generating
8.	Value addition to agricultural and horticultural produces	VIII	Less scope for establishing processing units

Table 2 clearly indicates that there is an increase in knowledge level of trainees on various agricultural and allied technologies after the training. The knowledge level of trainees with regard to various technologies before training was maximum in case of cashew and banana cultivation (52.50%) followed by Dairy and fishery (50 %). The reason for this may be that cashew is one of the major dry land horticultural crop grown in Dakshina Kannada district and assured income. Dairy and Fisheries technologies were practiced over the years because of well established marketing network.

After the training programme, the gain in Knowledge was seen towards all the topics covered under the training programme. The number of trainees who gained knowledge due to training was maximum in case of areca nut cultivation followed by Jasmine cultivation, Vermicompost preparation and paddy cultivation. Areca nut cultivation was ranked as most important (Table 3) due to its economic value and the severity of loss in yield incurred due to viral disease (Koleroga) has made them to gain more knowledge towards areca nut cultivation. Jasmine cultivation technology earns second position in terms of Knowledge gain (42.50 %). This may be due to the fact that many of the marginal farmers were practice Jasmine cultivation and obtains continues second position in Knowledge gain (42.50%) and steady income through out the year. This has really made them to accelerate their knowledge level on Jasmine cultivation. Since, trainees have more affinity towards organic farming, they were very much keen to gain knowledge towards Vermicompost preparation (35%). As the area under paddy cultivation is declining and the cost of cultivation is increasing, they were interested to know profitable paddy cultivation technologies. Hence they gained 32.50 % increase in knowledge in paddy cultivation. Trainees had fairy good knowledge in cashew and banana cultivation and hence it may result in low knowledge gain due to training programme. With reference to value addition to agricultural and

horticultural produces, trainees gained least knowledge this may be due to lack of facilities and opportunities for them to establish processing units at village level.

Knowledge Index:

The knowledge index of the trainees shows that over all on an average the knowledge level has increased to 65.71 per cent from 33.35 per cent. This clearly indicates that the training programme has accelerated the trainees' knowledge level on agriculture and allied technologies.

2. Impact analysis of Farmers Field School on Integrated Pest Management in Paddy

Methodology:

The study was conducted in a Farmers Field School (FFS) on Integrated Pest Management (IPM) in paddy during the rabi season of 2008 at Mogaru village of Mangalore taluk in Dakshina Kannada district. About 2 ha of paddy area was selected for this study where farmers apply pesticides in an huge amount. One group meeting was organized by inviting paddy growers of Mogaru village, Gram Panchayath president and Members, Agriculture Officer of concern Raitha Samparka Kendra (RSK) to indentify facilitators, Collaborators and other FFS trainees and to obtain approval of Gram Sabha for starting FFS in Mogaru village of Mangalore taluk. 28 paddy growers were selected including 5 SC/ ST and 3 women farmers for conducting FFS programme. This FFS curriculum involved 8 sessions which includes Exposure Visit and a Field Day programme. Each session had different activities like field observation, group dynamics, identification of pests and defenders, agro-ecosystem analysis, management of pest and diseases of paddy and efficient use of IPM practices. The impact studies on these activities were under taken for monitoring and assessment of the activities. The impact analysis was mainly done to know the change in Knowledge level of FFS trainees.

Measuring tool: Ballot Box Test method

Details of Methodology: For evaluating the knowledge level of Farmers Field School trainees (28) before and after the Farmers Field School programme, ballot Box test consisting of 25 questions were given to them. These 25 questions depict knowledge and awareness of trainees on IPM practices, INM practices, resistant varieties, chemical pesticides and biological control. For each question, three answers were provided and trainees need to drop the given slip in any one slot / box. The results were entered in a data processing sheet with one point for each correct answer. The ballot box test was conducted to FFS trainees before commencing technical session and also after the technical session. Sum of these scores were taken, average and paired 't' test were calculated.

Table 1: Gain in knowledge level of FFS trainees

Farmers ID	Pre training		Post training		Gain in knowledge level (%)
	Score	Knowledge level (%)	Score	Knowledge level (%)	
1.	6	24	18	72	48
2.	4	16	10	40	24
3.	6	24	16	64	40
4.	3	12	19	76	64
5.	9	36	16	64	28
6.	2	8	12	48	40
7.	5	20	16	64	44
8.	2	8	14	56	48
9.	8	32	19	76	44
10.	6	24	16	64	40
11.	5	20	15	60	40
12.	4	16	12	48	32
13.	3	12	17	68	56
14.	2	8	12	48	40
15.	1	4	12	48	44
16.	7	28	15	60	32
17.	3	12	11	44	32
18.	8	32	16	64	32
19.	7	28	16	64	36
20.	1	4	18	72	68
21.	5	20	22	88	68
22.	2	8	12	48	40
23.	2	8	14	56	48
24.	3	12	20	80	68
25.	3	12	18	72	60
	Mean	**17.12**	**Mean**	**61.76**	**44.64**
"t" value = 4.216**					

After analysing the pre and post evaluation data of Ballot Box test, it was clear that there was a tremendous change in the knowledge level of FFS trainees. Before training, the knowledge level of farmers varied from 4 to 36 per cent. After undergoing series of training programmes, it was clear that the knowledge level of farmers increased to the range of 40 to 88 per cert and a overall **44.64 per cent** was recorded as the gain in knowledge level of entire group.

The paired t test value 4.216 found significant at 5 % level clearly indicated that the knowledge level of Farmers Field School trainee after FFS programme was different from that of before FFS programme. This shows the impact of FFS programme on change in knowledge level of FFS trainees.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
State Department Department of Agriculture, Horticulture Animal Husbandry and Veterinary services, Fisheries, Child and women welfare development	• Training and demonstrations. • Providing technical information to the Extension functionaries during bi-monthly workshops • Diagnostic survey and forecasting of pest and disease in different crops. • Field days, Farmers day, World Food day etc. • Field visit to problematic crops in the District.
Non-Governmental Organization Shree Kshetra Dharmasthala Rural Development Project, Nagarika Seva Trust, Cooperative Societies and Vijaya Rural Developmental Foundation	• Training programmes and demonstrations • Participation in meeting • Farmers selection, FLD, OFT implementation • Training need assessment
Bank Co-operative Agri. Bank	• Training Programmes for the farmers/Self Help Groups/OFT/FLD implementation.
All India Radio	• Transfer of technology through radio talks. Announcing of messages to the farmers and KVK training Programme schedules. • Pest and Disease forecasting in different crops.

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
National Horticulture Mission	26-6-2009	Dept. of Horticulture, Mangalore	40000.00

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

S. No.	Programme	Nature of linkage	Remarks
1.	• Training programmes	Technical support to farmers during training programmes.	-
2.	• Organizing workshop cum Exhibitions	Technical support and guidance in organizing workshop and exhibition.	Five Kharif workshop cum Exhibitions organized
3.	• Farmers Field School	Training programme and field days.	Conducted Farmers Field School on Integrated Pest Management in Paddy.

Farmers Field School Results under ATMA

Integrated Pest Management in Paddy

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Paddy	Integrated Pest Management in Paddy	Jaya	-	Rainfed	1	1.0	-	-	39.40	30.50	29.18	19250	35460	18710	1.84	20500	27450	6950	1.34
	Total																		

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
Grains/panicle	175	140
Tillers/plant	30	14

Farmers Field School on Integrated Pest Management in Paddy

Sl. No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	FFS concept, Ballot Box test (Pre-test)	01	20	04	24	00	001	01	20	5	25
2.	Seed treatment and land preparation	01	20	04	24	00	01	01	20	05	25
3.	Pest management and AESA-I	01	20	04	24	00	01	01	20	05	25
4.	Disease Management and AESA-II	01	20	04	24	00	01	01	20	05	25
5.	Field Day on Integrated Pest Management in Paddy	01	20	04	24	00	01	01	20	05	25
6.	Post test and withdrawn programme	01	20	04	24	00	01	01	20	05	25

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

S. No.	Programme	Nature of linkage	Constraints if any
1.	Plant health Clinic and Disease forecasting Unit	• Advisory services made during the period on pathological and insect problems of various crops through 1) Diagnostic Field Visits – 84 No. 2) Farmers visit to PHC/DFU - 98 No. 3) Phone contacts - 135 No. 4) Radio talk - 4 No. 5) Press Coverage -16 No. 6) Literatures –a) Technical bulletin -2 No. b) Folders-5 No. • Provided scientific support to the Department of Horticulture *viz.,* creating awareness programmes on pest and disease of agri and horticultural crops,	-

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

S. No.	Programme	Nature of linkage	Remarks
1	Integrated fish farming	NFDB funded for conducting training programmes on fisheries technologies	Conducted one 7 days training programme to the farmers of Dakshina Kannada District.

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Vermi hatchery	2008	-	Earth worms	26 kg	26 kg	2000.00	10550.00	-
2.	Fisheries	2007	80 sq. m.	-	-	170 Nos.	-	800.00	-
3.	Poly house (Gerbera)	2008	260 sq.m.	African Daicy	414 flowers	414 flowers	11600.00	1242	The Gerbera yielding up to 3 years

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Paddy	7-7-2008	11-10-2008	3.6	MO-4	TFL Seeds	79	92160.00	63200.00	Here seeds have been converted

									to bulk
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	

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

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

13.E. Utilization of hostel facilities

Accommodation available (No. of beds): 18

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2008	02	03	-
November 2008	00	00	-
December 2008	00	00	-
January 2009	00	00	-
February 2009	02	06	-
March 2009	01	02	-
April 2009	27	01	-
May 2009	82	03	-
June 2009	28	01	-
July 2009	00	00	-
August 2009	04	01	-
September 2009	09	01	-

13.F. Database management: Nil

S. No	Database target	Database created

13.G. Details on Rain Water Harvesting structure and micro-irrigation system: Yet to be established

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

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	-	-	-	-	-	-	-
With KVK	Canara Bank	Fisheries College Branch, Mangalore	100857 100918 (RF)	SB	100857 100918 (RF)		

14.B. Utilization of funds under FLD on Oilseed *(Rs. in Lakh)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2009
	Kharif 2008	Rabi 2008-09	Kharif 2008	Rabi 2008-09	
Inputs		17500.00		11182.00	6318.00
Extension activities		2500.00		2472.00	28.00
TA/DA/POL etc.		2500.00		2423.00	77.00
TOTAL		**22500.00**		**16077.00**	**6423.00**

14.C. Utilization of funds under FLD on Pulses *(Rs. in Lakh)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2009
	Kharif 2008	Rabi 2008-09	Kharif 2008	Rabi 2008-09	
Inputs		52500.00		29940.00	22560.00
Extension activities		7500.00		1534.00	5966.00
TA/DA/POL etc.		7500.00		7348.00	152.00
TOTAL		**67500.00**		**38822.00**	**28678.00**

14.D. Utilization of funds under FLD on Cotton *(Rs. in Lakh): Nil*

14.E. Utilization of KVK funds during the year 2008-09 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	22.00	22.00	2048178.00
2	**Traveling allowances**	1.00	1.00	98,334.00
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.20	2.20	2,19,884.00
B	POL, repair of vehicles, tractor and equipments	1.30	1.30	1,30,000.00
C	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	0.70	0.70	69,998.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.50	0.50	49766.00
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.98	0.98	73,392.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.32	0.32	25,751.00
G	Training of extension functionaries	0.20	0.20	18184.00
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library	0.10	0.10	5238.00
k.	Farmers Field School	0.20	0.20	10087.00
	TOTAL (A)	29.5	29.5	**2748812.00**
B. Non-Recurring Contingencies				
1	**Works**			-
2	**Equipments including SWTL & Furniture (Fax)**	0.15	0.15	14406.00
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0.50	0.50	50000.00
4	**Library** (Purchase of assets like books & journals)			-
TOTAL (B)		0.65	0.65	**64406.00**
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**30.15**	**30.15**	**2813218.00**

Utilization of KVK funds during the year 2009-10 (up to August 2009) (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	23.00	23.00	991750.00
2	**Traveling allowances**	1.00	1.00	54390.00
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.50	1.50	112604.00
B	POL, repair of vehicles, tractor and equipments	1.20	1.20	87435.00
C	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	1.00	1.00	37297.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.60	0.60	6783.00
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.30	2.30	141135.00
F	On farm testing (on need based, location specific and newly generated information in the major production	0.20	0.20	4310.00

	systems of the area)			
G	Training of extension functionaries	0.10	0.10	-
H	Maintenance of buildings	-	-	-
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	0.10	0.10	2375.00
K.	Extension activities	0.25	0.25	-
L.	Farmers Field School	0.25	0.25	5717.00
	TOTAL (A)	**31.50**	**31.50**	**1443796.00**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2006 to March 2007	110560.00	70114.00	156261.00	24413.00
April 2007 to March 2008	24413.00	111451.00	116264.00	19600.00
April 2008 to March 2009	19600.00	161627.00	175946.00	5281.00