ANNUAL REPORT-2007-08

1. 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 (Dakshina Kannada), 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. Campus, Bangalore	080-23332442	080-3330277	vcuasbangalore_2007@rediffmail.com	www.uasbangalore.edu.in
Director of Extension University of Agricultural Sciences, Hebbal Campus, Bangalore.	080-23418883	080-23516836	deuasb@yahoo.co.in	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	drhh1954@rediffmail.com

1.4. Year of sanction : 2004

1.5. Staff Position (as on 15th September 2008)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Highest Qualification (For PC, SMS and Prog. Asstt)	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. H.Hanumanthappa	Programme Coordinator	Fisheries	Ph D	Rs. 12,000-18,300 (16620)	21-01-06	Permanent	SC
2	Subject Matter Specialist	Dr. Jayashree S.	Subject Matter Specialist	Home Science (F & N)	Ph D	Rs. 8,000-13,500 (9375)	02-03- 07	Permanent	OBC
3	Subject Matter Specialist	Dr. G. Nagesha	Subject Matter Specialist	Agril. Extension	Ph D	Rs. 8,000-13,500 (9375)	10-03- 07	Permanent	SC
4	Subject Matter Specialist	Dr. Parashuram Chandravanshi	Subject Matter Specialist	Soil Science	Ph D	Rs. 8,000-13,500 (9375)	16-03- 07	Permanent	SC
5	Subject Matter Specialist	Mr. Srinivas N.	Subject Matter Specialist	Horticulture	Msc	Rs. 8,000-13,500 (8275)	05-04 07	Permanent	SC
6	Subject Matter Specialist	Mr. Veerendra Kumar K.V.	Subject Matter Specialist	Plant Pathology	Msc	Rs .11,500 + HRA	06-08-08	Contract basis	SC
7	Subject Matter Specialist	-	-	-	-	-	-	-	-
8	Programme Assistant	-	Programme Assistant	-	-	-	-	Vacant	-
9	Computer Programmer	-	Computer Programmer	-	-	-	-	Vacant	-
10	Farm Manager	-	Farm Manager	-	-	-	-	Vacant	
11	Accountant / Superintendent	Mr. Ravichandra	Accountant / Superintendent	-	-	Rs .10,000-18,950 (10,500)	05-03- 05	Permanent	General
12	Stenographer	Mrs. Nalinakshi	Stenographer	-	-	Rs. 3850.00	26-07-08	Contract basis	OBC
13	Driver	Mr. Shiva Prasad B.	Driver	-	-	Rs. 2975.00	26-07-08	Contract basis	SC
14	Driver	--	Driver	-	-	-	-	Vacant	-
15	Supporting staff	Mr. Jayaram	Supporting staff	-	-	Rs. 2500-(5000)	13.11.2007	Permanent	General
16	Supporting staff	Mr. A. Annu	Supporting staff	-	-	Rs. 2500.00	26-07-08	Contract basis	SC

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

S. No.	Item	Area (ha)
1	Under Buildings	2.0
2.	Under Demonstration Units	0.11
3.	Under Crops	7.89
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 in lakhs.)	Starting Date	Plinth area (Sq.m)	Status of constrn.
1.	Administrative Building	ICAR	24-11-2007	550	42.25	-	-	-
2.	Staff Quarters (6)	ICAR	24-11-2007	400	32.35	-	-	-
3.	Farmers Hostel	ICAR	24-11-2007	300	35.72	-	-	-
4.	Demonstration Units (Fisheries)	ICAR	20-02-2007	80	1.75	-	-	-
5	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	94934	Good condition
M.F.Tractor 1035	2005	5,00,000	14111	Good condition
Hero Honda (Bike)	2006	40,000	13987	Good condition

C) Equipments and 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
LCD	Taken From KVK Udupi		

1.8. A). Details of SAC meeting conducted in 2007-08

Date	Number of Participants	Salient Recommendations	Action taken
19.03.2008	15	• Suggested to take up Front Line Demonstration on Integrated Nutrient Management in cashew in an area of 5 ha in Dakshina Kannada district. • Suggested to take up more Front Line Demonstration on quick wilt management in pepper • KVK should organize fisheries training programmes in collaboration with the Fisheries College. • Suggested to organize training programme and demonstration on problem of dropping of immature Arecanut. • Invite Dakshina Kannada district Chief Executive Officer as chief guest/Inaugurator of important training programmes and brief him the activities of Kendra. • Progressive and experienced farmers should be invited as resource persons while organizing On-campus training programmes. • KVK should organize need based training programmes and evaluate the level of adoption.	• Taken up Front Line Demonstration on Integrated Crop Management in cashew in an area of 2 ha. • Taken up Front Line Demonstration on quick wilt management in pepper. • KVK has organized two training programmes of 10 days duration in collaboration with the Fisheries College. Mangalore under NFDB, Hyderabad • Given technical information on problem of dropping of immature Arecanut during exhibitions and on and off campus training programmes. • Dakshina Kannada district Chief Executive Officer was invited as chief guest for integrated fish farming training programme and briefed him about the activities of Krishi Vigyan Kendra. • Progressive and experienced farmers like Jefree Monthero, Monappa Karkera, Arunambika Bhat, Antony D'souza and John Veghes were invited as resource persons for On-campus training programmes. • KVK is organising need based training programmes and Subject Matter Specialist (Extension) is being evaluating the level of adoption.

1.9 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	• Soil acidity • Imbalanced nutrient application • Non adoption of high yielding varieties	• 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 • 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
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

Priority thrust areas

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

2. DETAILS OF DISTRICT

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

CEREALS	**:**	Paddy and Maize
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, Mango and Sapota
PLANTATION CROPS	**:**	Arecanut, Coconut, Cashew, Pepper, Rubber, Vanilla and cocoa
FLOWER CROPS	:	Jasmine
ANIMAL HUSBANDARY	**:**	Fishery, Dairy, Piggery and Poultry

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

Agro-climatic Zone

Agro-climatic Zone	Characteristics
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. The temperature varies from maximum of 34^0C during the months of April and May and lowest temperature of 21.5^o C during the month of December.

Agro ecological situation

Agro ecological Situation	Characteristics
	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. The temperature varies from maximum of 34^0 C during the months of and April and May lowest temperature of 21.5^o C during the month of December. The majority of soil in the district consisting 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 low soluble salt content. The major nutrient status of the soils is varying from medium to low. The major crops grown in the districts are paddy, Arecanut, Coconut, Cashew, Pepper and Banana. In some parts of the district pulses like Black gram, Green gram and vegetables are being grown during Rabi/ Summer season.

2.3 Soil types

Soil type	Characteristics	Area in ha
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 (Qtl)	Productivity (Qtl /ha)
1.	Paddy	55948	138996	24.84
2.	Black gram	2111	1179	5.58
3.	Cowpea	607	289	4.76
4.	Arecanut	27481	49230.87	1.79
5.	Coconut	16094	2071.80	0.13
6.	Pepper	2008.31	36000	18.27
7.	Cashew	30524	2441900	-
8.	Cocoa	906	344800	394.06
9.	Vanilla	232.86	88.75	0.38
10.	Mango	1572.65	13231.55	8.41
11.	Sapota	184	2015	10.95
12.	Banana	3146.71	6062800	1937
13	Pine apple	356.75	21692	60.8
14	Jack Fruit	996	2589600	2600

15	Ginger	313.95	3593.44	11.45
16	Vegetables	2983	3028800	1015.35
17	Jasmine	66	1530	-

Source: Statistical Department, Dakshina Kannada

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
October	109	32.03	24.64	76.84
November	72	34.36	25.77	73.53
December	0	31.77	21.11	58.23
January	-	35.33	19.60	56.00
February	-	33.99	20.80	65.80
March	287.4	34.02	23.77	77.26
April	59.8	34.74	25.27	76.40
May	78.8	34.19	25.00	73.74
June	1025	32.80	24.93	87.05
July	610.8	31.67	24.90	79.95
August	599.0	32.24	23.21	80.97
September	252.0	31.40	23.54	75.26

Source: ARS, 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	-
Hens	-	-	-
Desi	-	-	-
Improved	-	-	-
Ducks	-	-	-
Turkey and others	-	-	-
Category	**Area**	**Production (mt)**	**Productivity**
Fish			
Marine	-	88972	-
Inland	-	1064.53	-
Prawn	-	9119	-

Source: Statistical Department, Dakshina Kannada

3. 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
07	07	54	54	10	10	27	27

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
40	40	1803	1803	201	201	1235	1235

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
-	14.50 Qtl. (MO-4 Variety)	6000	6000 Cashew saplings (Ullal -1)

3.B1. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1.	Nutrient management	Paddy	• Poor nutrient management. • Lack of Knowledge on use of RHA which is rich source of P and Silicon.	• Use of RHA in paddy cultivation as a source of P and Silicon	Zinc management in paddy	• Importance of soil testing and soil sample collection techniques. • SRI method of paddy cultivation. • Integrated cultivation practice.	• Recent advances in agriculture and Horticultural crops. • Innovative agricultural technology.	Field visits, Trainings	-
	Nutrient management	Arecanut	Poor in micro and macro nutrient management	• Micro Nutrient Management in Arecanut • Integrated Nutrient Management in Arecanut	-	• Cultivation of Arecanut. • Integrated Nutrient Management in Horticultural crops.	-	Field visits Trainings	-
	Nutrient management	Coconut	Poor nutrient management	-	Integrated Nutrient management in Coconut	-	-	Field visits, trainings	-
	Nutrient management	Cashew	No nutrient management	-	Nutrient management in cashew	-	-	Field visits.	-
	Nutrient management	Banana	Poor cultivation practices.	-	-	Vegetables and banana cultivation	-	Field visits.	-

	Nutrient management	Water melon	Poor nutrient management	-	Nutrient management in water melon	Cultivation and nutrient management in water melon	-	Field visits.	-
	Nutrient management	Jasmine	Poor nutrient management	Integrated Nutrient Management in Jasmine	-	Cultivation of Jasmine	-	Field visits, Trainings.	-
	Nutrient management	Ash gourd	Poor Potash management	Nutrient Management in Ash gourd	-	-	-	Field visits.	CO-1 variety
2.	Disease management	Arecanut	Inflorescence die back disease	Management of Inflorescence die back disease in Arecanut	-	• Management of Inflorescence die back in Arecanut. • Bordeaux mixture preparation and demonstration.	-	Method demonstrations, Field visits.	-
3.	Pest management	Paddy	-	-	-	Integrated Pest Management in paddy.	-	Field visits. Trainings.	-
	Disease management	Arecanut	Poor plant protection measures	-	Root grub management in Arecanut	-	-	Field visits.	-
	Pest management	Cashew	Poor plant protection measures	-	Tea mosquito management in Cashew	-	-	Field visits.	-
	Pest management	Jasmine	Whitefly incidence during March to May	Whitefly management in Jasmine	-	-	-	Field visits.	-
4.	Water management	Paddy	Lack of sufficient water for cultivation of paddy in Rabi season	-	Sri method of paddy cultivation	-	-	Field visits. Trainings.	-

5.	Introduction of new crop / variety	Baby corn	-	-	Introduction of maize (Baby corn) to coastal zone	-	-	Field visits.	Golden Baby variety
		Ginger	-	-	Introduction of High yielding varieties of Ginger	-	-	Field visits.	Himachal Variety
6.	Utilization of residual moisture	Black gram	Lack of utilization of residual moisture after paddy cultivation	-	Black gram cultivation practices	-	-	Field Day, Field visits.	TAU-1
7.	Value addition	Fruits, milk, cashew apple and fish	Lack of knowledge on preparation of value added products	-	-	• Preparation of valued added products from fruits, milk, cashew apple and fish. • Agriculture dependent enterprises in rural areas.	-	Method demonstration	-
8.	Mushroom Cultivation	Mushroom	Lack of knowledge in mushroom cultivation	-	-	Mushroom Cultivation	-	Method demonstration.	-

9.	Fisheries	Fish	Lack of knowledge in scientific cultivation of fish.	-	Composite fish culture.	• Composite fish culture. • Aquarium fabrication and its maintenance, production of ornamental fish seeds and preparation of value added products.	-	Field Day, Field visits.	-

3. B2 List of Technology Assessed during 2007-08

S. No	Thematic area	Name of the technology assessed	Area (ha.)	Number of trials	Remarks if any
1.	Integrated Nutrient Management	Use of Rice hull Ash as a P source in Paddy cultivation	2.0	05	-
2.	Micro nutrient management	Micro nutrient Management in Arecanut	2.0	10	-
3.	Integrated Nutrient Management	Nutrient Management in Arecanut	2.0	04	-
4.	Integrated Nutrient Management	Nutrient management in Jasmine	2.0	10	-
5.	Disease management	Inflorescence dieback disease management in arecanut	2.0	10	
6.	Potash Management	Nutrient management in Ash gourd	2.0	10	-
7.	Pest management	White fly management in Jasmine	-	10	-
		Total	**12**	**54**	

3. B3 List of Technology Refined during 2007-08 : Nil

3 . C Details of technology used during reporting period

Sl. No	Title of Technology	Crop/ enterprise	Mode of use				No. of farmers covered					
			OFT	FLD	Training	Others (Specify)	Other farmers			SC / ST farmers		
							Male	Female	Total	Male	Female	Total
1.	Use of RHA in paddy as a source of silicon and P	Paddy	Use of RHA in paddy as a source of silicon and P	Zinc Management in Paddy SRI Method of Paddy Cultivation	SRI Method of Paddy Cultivation	-	16	01	17	03	-	03
2	Micro Nutrient Management	Arecanut	Micro Nutrient Management in Arecanut	-	Integrated Nutrient Management in Arecanut	-	10	01	11	03	-	03
3	Integrated Nutrient Management	Arecanut	Integrated Nutrient Management in Arecanut									
		Jasmine	.Integrated Nutrient Management in Jasmine	-	-	-	05	03	08	01	01	02
		Coconut	-	Integrated Nutrient Management in Coconut	Integrated Nutrient Management in Coconut	-	04	00	04	00	00	00
4.	Nutrient Management	Cashew	-	Nutrient Management in Cashew	-	-	08	00	08	02	00	02
		Watermelon	-	Nutrient Management in watermelon	Cultivation and nutrient management in Watermelon	-	08	00	08	03	00	03
		Ash gourd	Nutrient Management in Ash gourd	-	-	-	10	00	10	00	00	00

5.	Management of Inflorescence die back disease	Arecanut	Management of Inflorescence die back disease	-	Management of Inflorescence die back disease	-	09	00	09	01	00	09
6.	White fly management	Jasmine	White fly management Jasmine	-	-	-	05	00	05	00	00	00
7.	Introduction of high yielding variety	Black gram	-	Black gram production technology	-	Field day	20	03	23	06	01	07
		Ginger	-	Introduction of high yielding variety of Ginger	-	-	03	00	03	00	00	00
		Baby corn	-	Introduction of Baby corn to coastal zone	-	-	05	00	05	00	00	00
8.	Root grub management	Areca nut	-	Root grub management in Arecanut	-	-	07	00	07	03	00	03
9.	Tea mosquito management	Cashew	-	Tea mosquito management in cashew	-	-	05	00	05	00	00	00
10.	Composite fish culture	Fisheries	-	Composite fish culture	-	Field day	03	00	03	00	00	00

3.1 Achievements on technologies assessed

A. Results of On Farm Trial

1. Use of RHA in paddy cultivation as a source of Phosphorus and Silicon

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment Yield (Qtl/ ha)	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy	Rainfed	Improper Nutrient management and Non availability of phosphorous due to its fixation in soil leads to lower yield.	Use of RHA in paddy cultivation as a source of Phosphorus and Silicon.	05	Recommended Dose of NK + RHA 2 tones / ha.	Grains/panicle Yield qtl/ha	168.4 41.50	T3: 41.50	Less Chaffy grains were observed.	-	-

Technology Assessed		Production per unit (Qtl/ ha)	Net Return (Profit) in Rs. / unit	BC Ratio
	13	14	15	16
Technology option 1	FYM: 1.5-2.0 ton/ha, Fertilizer: 125-150 kg of complex fertilizer	30.60	7500	1:1.30
Technology option 2	FYM:10 ton/ha, recommended Dose of NPK (60:30:45 kg/ha)	36.50	10025	1:1.40
Technology option 3	FYM 10 ton/ha, recommended Dose of NPK+ RHA 2 tones/ha	41.50	14275	1:1.57

2. Micro Nutrient Management 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 (chali Qtl/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	Improper Nutrient management, Micro nutrient deficiency in soil.	Micro nutrient management in Arecanut	10	Micro Nutrient Management in Arecanut	Early nut dropping Kg/pl. Nut Splitting Kg/pl Yield Kg/pl	0.28 0.36 2.49	34.23	Increase in yield with reduction in the nut drop and nut splitting	-	-

Technology Assessed		Production per unit (qtl/ha)	Net Return (Profit) in Rs./ unit	BC Ratio
13		14	15	16
Technology option 1	Variety: Mangala FYM:15-20 kg/pl, Green manure: 10kg/pl, Complex fertilizer @ 150 to 200 gm/pl., yield loss: 15-20%	23.10	91700	1:1.30
Technology option 2	Variety: Mangala, Green manure: 20kg/pl, FYM: 20 kg/pl, NPK:150:60:210 gm /pl, $ZnSO_4$: 20 g/pl, $MgSO_4$: 200 g/pl, Lime: 300 g/pl, Borax: 25 g/pl.	32.20	155400	1:2.20
Technology option 3	Variety: Mangala Green manure: 20 kg/pl, FYM: 20 kg/pl, Borax: 25 g/pl, COT: 2 kg/pl, Lime: 300 g/pl, NPK: 150:60:210 gm /pl	34.23	1,69,662	1:2.42

3. Integrated Nutrient Management 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 (chali Qtl/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	Poor nutrient management practices resulted in lower yield	Integrated Nutrient Management in Arecanut	4	Integrated Nutrient Management in Arecanut	Fresh bunch weight (kg/pl) Number of nut drops /pl Chali yield kg/pl	11.97 2.32 2.17	29.83	Increase in yield with reduction in the nut drop and nut splitting	-	-

Technology Assessed		Production per unit (qtl/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16
Technology option 1	FYM:15-20 kg/pl, Green manure; 10kg/pl, Complex fertilizer @ 150 to 200 gm/pl.	16.08	74,200	1:2.93
Technology option 2	Green manure: 20kg/pl, FYM-20 kg/pl, NPK: 150:60:210 gm /pl, $ZnSO_4$: 20 g/pl, $MgSO_4$: 200 g/pl, Lime: 300 g/pl, Borax: 25 g/pl	25.16	1,32,760	1:4.06
Technology option 3	Green manure-20 kg/pl, FYM-20 kg/pl, Lime: 300 g/pl, $ZnSO_4$- 20 g/pl, $MgSO_4$: 200 g/pl, Borax: 25g/pl, Neem cake: 1 kg/pl, Compost enriched with (*Azospirillum* 20 gm + PSB 20 gm /pl),NPK: 50 % of N,75 % of P& 100% K of Recommended dose of fertilizer (75:45:210 gm /pl)	29.83	1,64,086	1:4.66

4. Integrated Nutrient Management in Jasmine

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
Jasmine	Rain fed / Protective irrigation	Poor nutrient management resulted in low yield	Integrated Nutrient Management in Jasmine	10	Integrated Nutrient Management in Jasmine	Yield (kg/pl) Yield (ton/ha) B.C.Ratio	2.19 5.29 1:6.02	5.50	Increase in the yield and soil health	-	-

Technology Assessed		Production per unit (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16
Technology option 1	FYM : 10 kg, Groundnut cake :150 gm/pl, Burnt soil:1 kg, No phosphorus and potash application, Neem cake: 0.5kg /pl	3.57	4,26,170	1:4.40
Technology option 2	Organic manure: 20 kg /pl, Recommended dose of fertilizer 120:240:240 gm NPK/pl	5.28	8,13,120	1:6.00
Technology option 3	Neem cake: 0.5 kg/pl, Lime: 0.5 kg/pl, Enriched Bio compost 20 kg (20g. *Azospirillum* + 20g. PSB/pl), 50 % N through groundnut cake, 50%N, 75% of P& 100% K of Recommended Dose of Fertilizer	5.50	8,47,000	1:6.02

5. Nutrient Management 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	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	Imbalance use of fertilizers resulted in lower yield	Potash Management in Ash gourd	10	Potash management	Wt. of fruit(kg) No. of fruits/pl Yield(ton/ha)	4.48 5.10 25.10	25.10 t/ha	Increase in the yield with better keeping quality	-	-

Technology Assessed		Production per unit (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16
Technology option 1	FYM : 5 t/ha	15.00	13,900	1:1.49
Technology option 2	FYM : 12.5 t/ha, 50:50:0 kg NPK/ha	20.79	28,818	1:1.98
Technology option 3	FYM : 12.5 t/ha,50:50:70 kg NPK/ha	25.10	40,327	1:2.30

6. 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 (chali Qtl/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	10	Management of Inflorescence die back disease	No. of inflorescence infected/pl % disease incidence Yield(qtl/ha)	0.60 7.5 23.51 Qtl / ha	23.51	Application of nutrients and chemicals will reduces the incidences of the disease	-	-

Technology Assessed		Production per unit (Qtl. / ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16
Technology option 1	Spraying of Bavistin 2 gm /ltr	16.08	74,930	1:2.99
Technology option 2	• Spraying of Mancozeb 2.5 gm/ltr. at the time of opening of female flower	20.35	1,02,725	1:3.58
Technology option 3	• Sanitation Lime-300 gm Potash-400 gm Boron- 25 gm Zinc Sulphate-20 gm • Spraying of Mancozeb 2.5 gm/ltr at the time of opening of female flower	23.51	1,19,774	1:3.67

7. Whitefly management in Jasmine

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
Jasmine	Rain fed / Protective irrigation	Severity of Whitefly incidence during summer resulted in low yield	Whitefly management in Jasmine	10	• Spraying of Neem oil 4ml/ltr. during March • Spraying of Triazophos 2ml/ltr during April	No. of insect coloney/sq.ft. % sooty mould Yield (t/ha)	1.1 12.91 4.70 t/ha	4.70 t/ha	Timely spraying of chemicals reduces the pest incidence.	-	-

Technology Assessed		Production per unit (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16
Technology option 1	Monocrotophos-1ml or 2ml/ltr. Some times mixing of 2-3chemicals at a time and sprayed at severe infestation	3.37	4,09,240	1:4.60
Technology option 2	Spraying of Melathian 50 EC 2ml/ltr. during pest incidence	4.25	5,60,083	1:5.16
Technology option 3	Spraying of Neem oil 4ml/ltr. during March Spraying of Triazophos 2ml/ltr during April	4.70	6,36,580	1:5.42

B. 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 RHA in paddy cultivation as a source of Silicon and Phosphorous

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	Use of RHA in paddy as a source of silicon and Phosphorous
2.	Problem Definition	Nutrient management and Non availability of phosphorous due to its fixation in soil leads to lower yield
3.	Details of technologies selected for assessment	FYM:10 ton/ha, Recommended 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	10-15% increased in yield compared with farmers practice.
7.	Final recommendation for micro level situation	Application of RHA 2 tones per ha with recommended dose of fertilizer increased in the yield and available Phosphorous content in the soil. Hence, technology well suited for coastal acidic soils
8.	Constraints identified and feedback for research	Supply of Rice hull Ash from the Rice mills incurred more transportation expenditure. Application of RHA 2 tones per ha with recommended dose of fertilizer can be recommended for micro level situation.
9.	Process of farmers participation and their reaction	Farmers appreciated the technology and desired to adopt the same

2. Micro Nutrient Management in Arecanut

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	Micro Nutrient Management in Arecanut
2.	Problem Definition	Improper Nutrient management, Micro nutrient deficiency in soil.
3.	Details of technologies selected for assessment	Variety: Mangala Green manure: 20 kg/pl, FYM: 20 kg/pl, Borax: 25 g/pl, COT: 2 kg/pl, Lime: 300 g/pl, NPK: 150:60:210 gm /pl
4.	Source of technology	U.A.S. Dharwad
5.	Production system and thematic area	Rainfed/protective irrigated and Micro Nutrient Management
6.	Performance of the Technology with performance indicators	10-15% increased in yield due to reduction in the nut drop and nut splitting was observed due to application of COT, which is the mixture of micro nutrients.
7.	Final recommendation for micro level situation	Application of COT (2kg/pl.) with recommended dose of fertilizer results in reduction in the nut drop and nut splitting. Hence, the technology is well suited for micro level situation.
8.	Constraints identified and feedback for research	Non availability of Copper Ore Tailing in the local market
9.	Process of farmers participation and their reaction	Farmers felt that yield in refined practice is better over traditional method and slightly higher than the improved method. And reduction in the nut drop and nut splitting was observed due to application of COT, which is the mixture of micro nutrients.

3. Integrated Nutrient Management in Arecanut

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	Integrated Nutrient Management in Arecanut
2.	Problem Definition	Poor nutrient management practices resulted in lower yield
3.	Details of technologies selected for assessment	Green manure-20 kg/pl, FYM-20 kg/pl, Lime: 300 g/pl, $ZnSO_4$- 20 g/pl, $MgSO_4$: 200 g/pl, Borax: 25g/pl, Neem cake: 1 kg/pl, Compost enriched with (*Azospirillum* 20 gm + PSB 20 gm /pl),NPK: 50 % of N,75 % of P& 100% K of Recommended dose of fertilizer (75:45:210 gm /pl)
4.	Source of technology	U.A.S., Bangalore
5.	Production system and thematic area	Protective irrigation and nutrient management
6.	Performance of the Technology with performance indicators	18.56% increased in yield compared with recommended Nutrient supply.
7.	Final recommendation for micro level situation	Suitable for sustainable production of Arecanut by reducing inorganic fertilizers and hence, this technology is suited under micro level situation.
8.	Constraints identified and feedback for research	Leaching of nutrients, soil acidity and nutrient deficiencies were observed and hence, use of slow releasing fertilizers in Arecanut is very much required and hence, this can be taken for research.
9.	Process of farmers participation and their reaction	Farmers felt that yield in refined practice is better over traditional method and slightly higher than the improved method. But in long run assessed practice may help to maintain the soil health and sustain the yield

4. Integrated Nutrient Management in Jasmine

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	Integrated Nutrient Management in Jasmine
2.	Problem Definition	Poor nutrient management, low yield
3.	Details of technologies selected for assessment	Neem cake: 0.5 kg/pl, Lime: 0.5 kg/pl, Enriched Bio compost 20 kg (20g. *Azospirillum* + 20g. PSB/pl), 50 % N through groundnut cake, 50%N, 75% of P& 100% K of Recommended Dose of Fertilizer
4.	Source of technology	U.A.S., Bangalore
5.	Production system and thematic area	Rain fed with protective irrigation
6.	Performance of the Technology with performance indicators	4.16% increase in the yield with less wilt disease incidence
7.	Final recommendation for micro level situation	Technology very much suitable for small holding farmers at micro level situation
8.	Constraints identified and feedback for research	Leaching loss of nutrients was observed therefore research on slow releasing fertilizer use in jasmine is need to be taken up.
9.	Process of farmers participation and their reaction	Farmers convinced about the assessed technology. Since, this technology performed better over traditional practice and slightly higher than the improved method. Farmers also felt that this technology helps to improve the soil health for sustainable production in long run.

5. Nutrient Management in Ash gourd

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	Nutrient Management in Ash gourd
2.	Problem Definition	Imbalance use of fertilizers 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	20.73 % 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 and 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 convinced that application of potash as a nutrient source along with the recommended dose of fertilizers resulted higher yield with better keeping quality. Farmers agreed to adopt and disseminate the same technology to neighboring farmers.

6. 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 causes 30-40% yield loss
3.	Details of technologies selected for assessment	• Sanitation Lime-300 gm Potash-400 gm Boron- 25 gm Zinc Sulphate-20 gm Spraying of Mancozeb 2.5 gm/ltr at the time of opening of female flower
4.	Source of technology	ZARS, Brahmavar
5.	Production system and thematic area	Rainfed/ protective irrigation and Inflorescence die back disease
6.	Performance of the Technology with performance indicators	Application of nutrients, removal of infected debris and timely spraying of recommended chemical reduce the disease incidence, nut dropping and increase the yield.
7.	Final recommendation for micro level situation	Soil application of recommended dose of potash, Zinc, boron along with recommended spray schedule at the time of opening of female flowers found effective in disease management
8.	Constraints identified and feedback for research	Nil
9.	Process of farmers participation and their reaction	Farmers expressed the happiness about the demonstrated technology and there was low disease incidence observed when compared to Traditional practice

7. White fly management in Jasmine

Sl. No	Particulars	On Farm Trial
1	Title of Technology assessed	White fly management in Jasmine
2.	Problem Definition	Severity of Whitefly incidence during summer resulted in low yield
3.	Details of technologies selected for assessment	Spraying of Neem oil 4ml/ltr. during March Spraying of Triazophos 2ml/ltr during April
4.	Source of technology	U.A.S Bangalore
5.	Production system and thematic area	Protective irrigation , pest incidence during summer
6.	Performance of the Technology with performance indicators	Timely spraying of chemicals will reduces the pest incidences, increases the vigour of the plant and flower yield
7.	Final recommendation for micro level situation	Timely spraying of Triazophos 2ml/ltr. and Neem oil 4ml/ltr. is proven to be manage whitefly incidence
8.	Constraints identified and feedback for research	Proper canopy management is not been practiced
9.	Process of farmers participation and their reaction	Farmers appreciated the assessed technology and it has proven to be effective over traditional method by reducing whitefly infestation

3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous years and popularized during 2007-08 and recommended for large scale adoption in the district

Sl.No	Thematic Area	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of villages	No. of farmers	Area in ha
1	Zinc management	**Zinc management in Paddy** • Soil application 20 kg /ha	• Method demonstration • Training • Field visits	05	-	-
2	Varietal introduction	**Introduction of Baby corn to coastal zone**	• Method demonstration • Field visits	05	-	-
3	Scarcity of water	**SRI method of Paddy cultivation**	• Training • Field visits • Method demonstration	10	-	-
4	Integrated Nutrient Management	**Integrated Nutrient Management in Coconut** • Application of Recommended dose of fertilizer -500:320:1200 g NPK / pl/ Yr, • Lime-4 Kg / plant • Boron-50 g / pl, $MgSO_4$-500 g / pl • Neem cake- 2.5 Kg /pl / yr	• Field visits • Training • Method demonstration	04	20	10
5	Varietal introduction	**Introduction of high yielding variety of Ginger** Variety : Himachal 1500 kg/ha	• Method demonstration • Field visits	02	05	2.0

6	Nutrient Management	**Nutrient Management in Cashew** Application of Recommended dose of fertilizer 500:250:250 NPK gm/pl/year	• Training • Method demonstration • Field visits	04	20	5.0
7	Nutrient Management	**Nutrient Management in watermelon** Application of Recommended dose of fertilizer 100:88:100 NPK kg/ha	• Method demonstration • Field visits	02	10	3.0
8	Pest management	**Root grub management in Areca nut** • Application of Phorate @ 25 gm/pl during June-July. • Drenching of Chloropyriphos 5ml/ltr during Sept.- Oct	• Training • Group discussion • Method demonstration • Field visits	05	25	10
9	Pest management	**Tea mosquito management in Cashew** • Monocrotophos 36 SL @ 1.5 ml/ lit will be spray at October-November • Carbaryl 50 WP @ 2 gm/lit will be sprayed during December –January • Lambdasahelohetrin 0.6 ml /lit during February	• Training • Group discussion • Method demonstration • Field visits	03	15	5.0
10	Utilization of residual moisture	**Black gram production technology** Variety : TAU-1	• Training • Field days • Field visits	08	45	15

b. **Details of FLDs implemented during 2007-08 (Information is to be furnished in the following three tables for each category i.e. Cereals, Horticultural crops, oilseeds, pulses, cotton and commercial crops.)**

a. Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Paddy	Poor Zinc management	Zinc management in Paddy	Kharif-2007	5.0	5.0	01	04	05	-
2	Baby corn	Varietal introduction	Introduction of Baby corn to coastal zone	Summer-2008	2.0	2.0	01	04	05	-
3	Paddy	Scarcity of water	SRI method of paddy cultivation	Rabi-2007	5.0	5.0	03	07	10	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	Kharif-2007	RF	Laterite	Medium	Medium	Low	Paddy	11.07-2007	10-10-2007	2142	69
Baby corn	Summer-2008	RF/Protective	Laterite	Medium	Medium	Low	Paddy	07-01-2008	12-04-2008	347.2	06
Paddy	Rabi-2007	RF/Protective	Laterite	Medium	Medium	Low	Paddy	12-11-2007	25-02-2008	53.8	02

Performance of FLD

Sl. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Paddy	Zinc management	MO-4	05	5.0	42.5	38.25	40.10	33.00	21.51	10.4 Panicles / plant	5.4 Panicles / plant
2	Baby corn	Introduction of variety	Baby corn (Golden Baby)	05	2.0	27.00	20.00	23.20	-	-	3.2 cobs /pl	-
3	Paddy	SRI method of Paddy cultivation	Champaka	10	5.0	60.00	31.42	47.83	33.52	42.69	43.70 panicles/pl	15.00 panicles/pl

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
15000	130266	34085	28050	19085	14784	1:1.27
12000	-	27840	-	15840	-	1:1.32
12000	15000	44676	28492	32676	13492	1:2.72

b. Horticulture Crops

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Coconut	Integrated Nutrient Management	Integrated Nutrient Management in Coconut	Rabi-2007	2.0	2.0	01	03	04	-
2	Ginger	Varietal Introduction	Introduction of high yielding variety of Ginger	Kharif-2007	2.0	2.0	01	02	03	-
3	Cashew	Nutrient Management	Nutrient Management in Cashew	Rabi-2007	2.0	2.0	02	08	10	-
4	Water melon	Nutrient Management	Nutrient Management in Watermelon	Rabi-2007	2.0	2.0	02	09	11	-
5	Arecanut	Plant Protection	Root grub management in Areca nut	Kharif-2007	2.0	2.0	02	0.8	10	-
6	Cashew	Pest management	Tea mosquito management in Cashew	Rabi-2007	2.0	2.0	01	04	05	-

Details of farming situation

Crop	Season	Farming situation (RF/ Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Coconut	Rabi-2007	RF/Protective	Laterite	Medium	Low	Low	-	-	23-7-2008	3769	126
Ginger	Kharif-2007	RF	Laterite	Medium	Low	Low	Vegetables (Bhendi)	18-06-2007	03-03-2008	3839	128
Cashew	Rabi-2007	RF	Laterite	Medium	Low	Low	-	-	12-05-2008	3769	126
Watermelon	Rabi-2007	Protective irrigation	Laterite	Medium	Low	Low	Paddy	13-01-2008	25-03-2008	287.4	6
Arecanut	Kharif-2007	RF	Laterite	Medium	Low	Low	-	-	22-11-2007	3769	126
Cashew	Rabi-2007	RF	Laterite	Medium	Low	Low	-	-	29-04-2008	3769	126

Performance of FLD

Sl. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Coconut	Integrated Nutrient Management	West Coast Tall	04	2.0	97 nuts/pl	88 nuts/pl	93 nuts/pl	51.2 nuts/pl	81.60	17.5 % mite Infestation	38.0 % mite Infestation
2	Ginger	Introduction of high yielding variety	Himachal	03	2.0	190	160	183.30	-	-	159 gm rhizome/hill	-
3	Cashew	Nutrient Management	Ullal-1	10	2.0	15.0	11.0	13.35	5.62	137.5	155.8 nuts per Kg	170.25 nuts per Kg
4	Water melon	Nutrient Management	Panthnagar	11	2.0	400	300	341.36	202.0	68.99	4.13 Kg /fruit	3.50 Kg /fruit
5	Arecanut	Root grub management	Mangala	10	2.0	13.61	10.31	11.96	7.2	66.11	15.6 % yellowing	42.7 % yellowing
6	Cashew	Tea mosquito management	Ullal-1	05	2.0	11.50	9.00	10.50	5.88	78.57	1.2 shoot infected/sq.m^2	6.2 shoot infected/sq.m^2

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
15500	10300	68820	37888	53320	27588	1:4.40
115000	-	274950	-	159950	-	1:2.39
11145	8500	40200	16860	29055	8860	1:3.60
28000	26750	170500	101000	142500	74250	1:6.08
38725	34480	83720	50400	44995	15920	1:2.16
11625	9364	31500	17640	19875	9140	1:2.70

c) Pulses

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Black gram	Utilization of residual moisture	Black gram production technology	Rabi-2007	15.0	15.0	07	23	30	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Black gram	Rabi-2007	RF	Laterite	Medium	Medium	Low	Paddy	22-11-2007	20-01-2008	53.8	2

Performance of FLD

Sl. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Black gram	Black gram production technology	TAU-1	30	15.0	5.16	3.2	4.74	3.76	25.81	28 Pods/Pl	16 pods/pl

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	**Local Check**	**Demonstration**	**Local Check**	**Demonstration**	**Local Check**	
14	**15**	**16**	**17**	**18**	**19**	**20**
4215	3900	14220	11280	10005	7380	**1:2.30**

Table – 2 E Front Line Demonstrations on Livestock enterprises

Enterprise	Variety/ Breed/ Species	No. of farmers	No. of Units	Size of Unit	Performance Parameter indicators	Data on parameter in relation to technology demonstrated		Per cent change in the parameter	Remarks
						Demon.	Local check		
Fisheries (Composite fish culture)	Catla	3	3	-	Yield (kg/ha)	2644.10	1600	65.26	Increase in yield and survival compared to local check
	Common carp				Yield (kg/ha)	42.10	30.0	40.33	

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
1. Seed/Variety						
Ginger	Kharif-2007	Introduction of high yielding variety of Ginger	Rainfed	183.30	-	-
Baby corn	Summer - 2008	Introduction of Baby corn to coastal zone	Rainfed + Protective irrigation	23.20	-	-
3. Fertilizer management						
Paddy	Kharif-2007	Zinc management in paddy	Rainfed	40.10	33.00	21.51
Coconut	Rabi-2007	Integrated Nutrient Management	Protective irrigation	93 nuts/pl	51.2 nuts/pl	81.60
Cashew	Rabi-2007	Nutrient Management	Rainfed	13.35	5.62	137.5
Watermelon	Rabi-2007	Nutrient Management	Protective irrigation	341.36	202.0	68.99
4. Plant Protection						
Arecanut	Kharif-2007	Root grub management	Rainfed + Protective irrigation	11.96	7.2	66.11
Cashew	Rabi-2007	Tea mosquito management	Rainfed	10.50	5.88	78.57
5. Combination of components (Please specify)						
Paddy	Kharif-2007	SRI method of cultivation	Rainfed + Protective irrigation	47.83	33.52	42.69

Technical Feedback on the demonstrated technologies

Frontline Demonstration:

Paddy:

- Application of Zinc Sulphate increased paddy yield up to 20% and also observed less Chaffy grains.
- Adoption of SRI method of paddy cultivation increased paddy yield up to 30.33 % and saved less water requirement for paddy

Baby corn:

- Maize can be grown in coastal zone as a alternative crop in Rabi/Summer season.

Coconut:

- Combination of components like lime and nutrients management has increased the soil pH. This resulted in higher yields by better nutrient up take.
- Application of neem cake considerably reduced mite infestation

Arecanut:

- Application of Phorate 25gm/pl. during May-June and drenching of Chlorpyriphos 5ml/ltr. (2ltr/pl.) during September reduced root grub incidence and recorded higher yield compared to farmers practice.

On Farm Trials:

Paddy:

- Use of Rice Hull Ash increased paddy yield up to 15-20% and also observed less Chaffy grains, disease and pest.

Arecanut:

- 10-15% increased in yield due to reduction in the nut drop and nut splitting was observed due to application of COT, which is the mixture of micro nutrients.

- Accepted the integrated nutrient management through organic and inorganic fertilizers which has helped to increase the productivity and fertility of the soil in long run.

- Farmers appreciated the technology management on the Arecanut root grub with integrated approaches.

Farmers' reactions on specific technologies

Frontline demonstration:

Paddy:

- Farmers appreciated the technology over traditional practice.
- Farmers felt that yield in SRI method of paddy cultivation is better over traditional practice but they observed weed management is the major problem in SRI method of paddy cultivation.

Baby corn :

- Farmers appreciated the introduction of maize in coastal zone as an alternative crop according to farmers opinion cost of cultivation is less when compared to paddy cultivation.

On Farm Trials:

Paddy:

- Farmers felt that yield in refined practice is better over traditional practice. But in long run refined practice may help to maintain the soil health and sustain the yield.

Arecanut:

- Farmers felt that yield in refined practice is better over traditional method and slightly higher than the improved method. And reduction in the nut drop and nut splitting was observed due to application of COT, which is the mixture of micro nutrients.

Jasmine

- Integrated Nutrient Management helped to sustain the yield and soil health
- It improved the quality and shelf life of the flower.

Ash gourd

- Application of potash as a nutrient along with the recommended dose of fertilizers resulted in higher yield and better keeping quality of the ash gourd.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1.	Field days	03	15.02.2008	22	-
			10.03.2008	40	-
			24.05.2008	47	-
			Total	**109**	-
2.	Farmers Training	04	31.10.2007	18	-
			11.10.2007	15	
			1.01.2008	26	
			6.01.2008	55	
			Total	**114**	

c. Details of FLD on Enterprises

(i) Farm Implements: Nil

(ii) Livestock Enterprises:

Enterprise	Variety/ breed/Species/others	No. of farmers	No. of Units	Size of Unit (ha)	Performance Parameter indicators	Data on parameter in relation to technology demonstrated		Per cent change in the parameter	Remarks
						Demon.	Local check		
Fisheries (Composite fish culture)	Catla	03	03	0.01	Yield (kg/ha)	2644.10	1600	65.26	Recorded increased yield and survival in demonstrations compared to local check
	Common carp				Yield (kg/ha)	42.10	30.0	40.33	

(iii) Other Enterprises: Nil

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

A. ON Campus

Farmers and farm women

Date	Title of the training programme	Duration in Days	Number of participants (General)			Number of SC/ST			Total number of participants		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
16.10.07 to 18.10.07	Preparation of value added products from fruits milk and fish	03	10	23	33	0	2	2	10	25	35
13.3.08 to 15.3.08	Aquarium fabrication And its maintenance ,production of ornamental fish seeds and preparation of value added products from fish	03	20	4	24	4	2	6	24	6	30
17.3.08 to 19.3.08	Preparation and demonstration of value added, products from Cashew Apple	03	09	25	34	01	02	03	10	27	37
Total	**03**		**39**	**52**	**91**	**05**	**06**	**11**	**44**	**58**	**102**

Extension Personnel

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
13.12.07 & 14.12.07	Recent advances in Agriculture Horticulture crops	2	22	13	35	3	3	6	25	16	41
21.05.08 to 22.05.08	Innovative Agricultural technology	02	18	17	35	2	2	4	20	19	39
Total	**02**		**40**	**30**	**70**	**05**	**05**	**10**	**45**	**35**	**80**

Rural youth: Nil

A) OFF Campus

Farmers and Farm Women

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
04-10- 07	Cultivation of Arecanut	01	19	11	30	06	01	07	25	12	37
30-10-07	Management of inflorescence die back in Arecanut	01	16	0	16	2	0	2	18	0	18
17-12-07	Integrated Nutrient Management in Arecanut	01	36	04	40	03	02	05	39	06	45
20-12- 07	Integrated Pest management in Paddy and safety use of Pesticides	01	40	02	42	04	01	05	44	03	47
22-12-07	Mushroom Cultivation	01	23	08	31	10	06	16	33	14	47
22-12-07	Composite Fish culture	01	10	06	16	0	01	01	10	07	17
23-12-07	Agriculture dependent enterprise in rural areas	01	02	30	32	0	07	07	02	37	39
24-12-07	Mushroom Cultivation	01	0	30	30	0	06	06	0	36	36
27-12-07	Importance of soil testing and soil sample collection technique	01	31	48	79	08	01	09	39	49	88
28-2-08	Importance of soil testing and soil sample collection technique	01	31	48	79	08	12	20	39	60	99
01-01-08	Cultivation and nutrient management in Watermelon	01	22	0	22	04	0	04	26	04	30
06-01-08	Sri method of paddy cultivation	01	19	28	47	06	02	08	25	30	55
10-01-08	Vegetables and banana cultivation	01	04	30	34	01	02	03	05	32	37
	Demonstration on soil sample collection method	01	44	48	92	04	15	19	48	63	111
29-05-08	Bordeaux mixture preparation demonstration	01	29	0	29	11	0	11	40	0	40
29-05-08	Bordeaux mixture preparation demonstration and soil sampling	01	30	12	42	03	0	03	33	15	48
30-05-08	Arecanut cultivation and Bordeaux mixture preparation demonstration	01	24	04	28	06	0	06	30	04	34

30-05-08	Bordeaux mixture preparation demonstration and soil sampling	01	26	11	37	09	01	10	35	12	47
31-05-08	Bordeaux mixture preparation demonstration	01	20	21	41	04	02	06	24	23	47
31-05-08	Arecanut cultivation and Bordeaux mixture preparation demonstration	01	24	09	33	03	0	03	27	09	36
03-06-08	Bordeaux mixture preparation demonstration	01	38	0	38	02	0	02	40	0	40
04-06-08	Bordeaux mixture preparation demonstration	01	30	06	36	02	0	02	32	06	38
05-06-08	Bordeaux mixture preparation demonstration	01	16	06	22	03	0	03	19	06	25
12-06-08	Bordeaux mixture preparation demonstration	01	34	18	52	11	07	18	45	25	70
18-06-08	Bordeaux mixture preparation demonstration	01	23	09	32	03	0	03	26	09	35
21-06-08	Cultivation of Agriculture and Horticulture crop	01	24	08	32	01	0	01	25	08	33
11-07-08	Integrated cultivation practice in Paddy	01	09	24	33	02	01	03	11	25	36
16-07-08	Scientific cultivation of Paddy	01	24	04	28	02	0	02	26	04	30
17-07-08	Integrated Nutrient Management and Integrated Pest management	01	25	12	37	04	0	04	29	12	41
11-08-08	Integrated Nutrient Management horticultural crop	01	26	0	26	01	0	01	27	0	27
	Total	**30**	**699**	**437**	**1136**	**123**	**67**	**190**	**822**	**511**	**1333**

Rural Youth: Nil

C) Consolidated table (ON and OFF Campus)

Farmers and Farm Women

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
04-10- 07	Cultivation of Arecanut	01	19	11	30	06	01	07	25	12	37
16.10.07 to 18.10.07	Preparation of value added products from fruits milk and fish	03	10	23	33	0	2	2	10	25	35
30-10-07	Management of inflorescence die back in Arecanut	01	16	0	16	2	0	2	18	0	18
17-12-07	Integrated Nutrient Management in Arecanut	01	36	04	40	03	02	05	39	06	45
20-12- 07	Integrated Pest management in Paddy and safety use of Pesticides	01	40	02	42	04	01	05	44	03	47
22-12-07	Mushroom Cultivation	01	23	08	31	10	06	16	33	14	47
22-12-07	Composite Fish culture	01	10	06	16	0	01	01	10	07	17
23-12-07	Agriculture dependent enterprise in rural areas	01	02	30	32	0	07	07	02	37	39
24-12-07	Mushroom Cultivation	01	0	30	30	0	06	06	0	36	36
27-12-07	Importance of soil testing and soil sample collection technique	01	31	48	79	08	01	09	39	49	88
28-2-08	Importance of soil testing and soil sample collection technique	01	31	48	79	08	12	20	39	60	99
01-01-08	Cultivation and nutrient management in Watermelon	01	22	0	22	04	0	04	26	04	30
06-01-08	Sri method of paddy cultivation	01	19	28	47	06	02	08	25	30	55
10-01-08	Vegetables and banana cultivation	01	04	30	34	01	02	03	05	32	37
28-02-2008	Demonstration on soil sample collection method	01	44	48	92	04	15	19	48	63	111

13.3.08 to 15.3.08	Aquarium fabrication And its maintenance ,production of ornamental fish seeds and preparation of value added products from fish	03	20	4	24	4	2	6	24	6	30
17.3.08 to 19.3.08	Preparation and demonstration of value added, products from Cashew Apple	03	09	25	34	01	02	03	10	27	37
29-05-08	Bordeaux mixture preparation demonstration	01	29	0	29	11	0	11	40	0	40
29-05-08	Bordeaux mixture preparation demonstration and soil sampling	01	30	12	42	03	0	03	33	15	48
30-05-08	Arecanut cultivation and Bordeaux mixture preparation demonstration	01	24	04	28	06	0	06	30	04	34
30-05-08	Bordeaux mixture preparation demonstration and soil sampling	01	26	11	37	09	01	10	35	12	47
31-05-08	Bordeaux mixture preparation demonstration	01	20	21	41	04	02	06	24	23	47
31-05-08	Arecanut cultivation and Bordeaux mixture preparation demonstration	01	24	09	33	03	0	03	27	09	36
03-06-08	Bordeaux mixture preparation demonstration	01	38	0	38	02	0	02	40	0	40
04-06-08	Bordeaux mixture preparation demonstration	01	30	06	36	02	0	02	32	06	38
05-06-08	Bordeaux mixture preparation demonstration	01	16	06	22	03	0	03	19	06	25
12-06-08	Bordeaux mixture preparation demonstration	01	34	18	52	11	07	18	45	25	70
18-06-08	Bordeaux mixture preparation demonstration	01	23	09	32	03	0	03	26	09	35
21-06-08	Cultivation of Agriculture and Horticulture crop	01	24	08	32	01	0	01	25	08	33
11-07-08	Integrated cultivation	01	09	24	33	02	01	03	11	25	36

	practice in Paddy										
16-07-08	Scientific cultivation of Paddy	01	24	04	28	02	0	02	26	04	30
17-07-08	Integrated Nutrient Management and Integrated Pest management	01	25	12	37	04	0	04	29	12	41
11-08-08	Integrated Nutrient Management horticultural crop	01	26	0	26	01	0	01	27	0	27
Total	**33**	**39**	**738**	**489**	**1227**	**128**	**73**	**201**	**866**	**569**	**1435**

Rural Youth: Nil

Extension Personnel

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
13.12.07 & 14.12.07	Recent advances in Agriculture Horticulture crops	2	22	13	35	03	03	06	25	16	41
21.05.08 to 22.05.08	Innovative Agricultural technology	2	18	17	35	02	02	04	20	19	39
Total	**02**		**40**	**30**	**70**	**05**	**05**	**10**	**45**	**35**	**80**

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	No. of courses	Duration (days)	No. of Participants General			No. of Participants SC/ST			No. of Participants Total		
					Male	Female	Total	Male	Female	Total	Male	Female	Total
Agriculture	• Poor nutrient management • Pest and Disease management • Acidic Soil • Value Addition	Integrated farming system	01	07	20	06	26	03	02	05	23	08	31

Integrated Farming system	• Poor management Practices	Improved Agricultural and Horticultural Animal Husbandry and fisheries technology	01	07	26	04	30	02	01	03	28	05	33
		Total	**02**		**46**	**10**	**56**	**05**	**03**	**08**	**51**	**13**	**64**

(E) Sponsored Training Programmes (Give details only for sponsored programmes)

Farmers

Sl. No	Title	Thematic area	Month	Duration (days)	No. of courses	No. of Participants							Sponsoring Agency
						Male		Female		Total			
						Others	SC/ST	Others	SC/ST	Others	SC/ST	Total	
1.	Post harvest handling and processing, of Horticultural Produce	Value addition	October	02	01	30	03	15	02	45	05	50	Dept. of Hort
2.	Post harvest handling and processing, of Horticultural Produce	Value addition	December	02	01	00	00	90	09	90	09	99	Dept. of Hort
3.	Post harvest handling and processing, of Horticultural Produce	Value addition	February	02	01	37	02	28	01	65	03	68	Dept. of Hort
4.	Training and demonstration on Integrated Fish Farming	Lack of knowledge on Integrated Fish Farming	August	07	02	33	02	02	00	35	02	37	NFDB
		Total				**100**	**07**	**135**	**12**	**235**	**19**	**254**	

3.4. Extension Programmes (including activities of FLD programmes)

For Farmers

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	03	85	10	95	6	2	8	91	12	106
Exhibition	05	301	180	481	70	16	86	371	196	567
Method Demonstrations	07	193	239	432	-	-	-	193	239	432
Farmers Seminar	02	92	19	111	-	-	-	92	19	111
Lectures delivered	11	112	278	390	06	02	08	118	280	398
Advisory Services	50	43	07	50	-	-	-	43	07	50
Scientific visit to farmers field	174	139	35	174	-	-	-	139	35	174
Farmers visit to KVK	159	116	43	159	-	-	-	116	43	159
Diagnostic visits	12	22	00	22	-	-	-	22	00	22
Field visits	174	139	35	174	-	-	-	139	35	174
Exposure visits	04	231	17	248	04	02	06	235	19	254
Soil test campaigns	03	126	172	298	-	-	-	126	172	298
Celebration of important days (specify)										
World Food Day	01	10	25	35	-	-	-	10	25	35
Women in Agriculture Day	01	27	11	38	-	-	-	27	11	38
International Farmers Day	01	2	37	39	-	-	-	2	37	39
Newspaper coverage	94	• Activities of KVK								
Radio Programmes	10	• Activities of KVK • Role of KVK in transfer of technology • Acid Soil management • Cultivation of Agricultural crops • Cultivation of Horticultural crops • Jasmine cultivation • Koleroga management in Arecanut • Pest and disease management in Horticultural crops • Integrated fish farming								

		• Importance of technology transfer in Agriculture
TV Programmes	01	• Management of Acid soil in coastal zone
Publications		
Popular articles	07	• Potentiality of Processing Horticultural Crops in Coastal Karnataka • Integrated Farming Systems-Way to High Productivity • Need to control fungal attack? try Trichoderma • Koleroga management in Arecanut • Quick wilt management in Pepper • Insect management in Paddy • Reason for nut dropping in Arecanut and their control
Extension Literature	07	• Profitable Crop-Kokum • Value added products of Banana • Krishi Vigyan Kendra- A ray of hope • Koleroga management in Arecanut • Quick wilt management in Pepper • Cultivation of Patchouli in coastal zone • Aquarium for fabrication and its maintenance • Cultivation of Black gram

For Extension personnel: Nil

3.5 Production and supply of technological products (2007-08)

SEED MATERIALS

Sl. No.	Crop		Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	**CEREALS**	Paddy	MO-4	14.50	22910	35

SUMMARY

Sl. No.	Crop		Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	Cereals	Paddy	14.50	22910	35
TOTAL			**14.50**	**22910**	**35**

PLANTING MATERIALS

Sl. No.	Crop		Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	Plantation crops	Cashew	Ullal-1	6000	84000	52

SUMMARY

Sl. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	Plantation crops	6000	84000	52
	TOTAL	**6000**	84000	52

BIO PRODUCTS: Nil

SUMMARY

LIVESTOCK: Nil

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

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

(B) Literature developed/published

Item	Title	Authors name	Number
Technical Bulletins	Plant protection in Arecanut	Mr. Veerendra kumar K.V	250
Popular articles	Potentiality of Processing Horticultural Crops in Coastal Karnataka	Dr. Jayashree S.	-
	Integrated Farming Systems-Way to High Productivity	Dr. G. Nagesha	
	Reasons for nut drop and its management in arecanut	Dr. G. Nagesha	
	Need to control fungal attack? try Trichoderma	Mr. Veerendra kumar K.V	
	Koleroga management in Arecanut	Mr. Veerendra kumar K.V	
	Quick wilt management in Pepper	Mr. Veerendra kumar K.V	
	Insect management in Paddy	Mr. Veerendra kumar K.V	
Extension literature	Profitable Crop-Kokum	Dr. Jayashree S.	1000
	Value added products of Banana	Mr. Srinivas N.	500
	Krishi Vigyan Kendra- A ray of hope	Dr. H. Hanumanthappa	500
	Koleroga management in Arecanut	Mr. Veerendra kumar K.V	750
	Quick wilt management in Pepper	Mr. Veerendra kumar K.V	750
	Cultivation of Patchouli in coastal zone	Mr. Srinivas N.	1000
	Aquarium for fabrication and its maintenance	Dr. K.M. Rajesh	1000
	Cultivation of Black gram	Dr. G.Nagesh	500
Books	Post harvest Handling of Horticultural crops	Mr. Srinivas N.	500
	TOTAL		

(C) Details of Electronic Media Produced: Nil

3.7. 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

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

3.9 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

3.10 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

3.11 Field activities

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

3.12. Activities of Soil and Water Testing Laboratory: Yet to be Establish

4.0 IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period): Study not conducted

4.2. Cases of large scale adoption: Nil

4.3 Details of impact analysis of KVK activities carried out during the reporting period

Name of specific technology/skill transferred	No. of participants	% of Knowledge gain	
		Before	After
Integrated farming system	40	33.35	65.71

5.0 LINKAGES

5.1 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 development	• Conducting training and demonstrations. • Extension functionaries meeting and technical discussion in bi-monthly workshops • Diagnostic survey and suggestion • Celebration of Field days, Farmers day, World Food day etc. • Training need assessment
Non-Governmental Organization Shree Kshetra Dharmasthala Rural Development Project, Nagarika Seva Trust, Cooperative Societies	• Conducting training programmes • Participation in meeting • FLD, OFT implementation • Training need assessment
Bank Co-operative Agri. Bank	• Collaborative activities for Shelf Help Groups. Conducting training Programmes for the farmers
All India Radio	• Transfer of technology through radio talks and message, announcing KVK training Programme schedules.

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Post Harvest technology in Horticultural crops	29-7-2007	Department of Horticulture	2,00000

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

S. No.	Programme	Nature of linkage	Remarks
1.	• Conducting training programmes	Providing technical support	-
2.	• Organizing workshop cum Exhibitions	Providing technical guidance and collaborating in extension programmes	Five Kharif workshop cum Exhibitions were organised

5.4 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	• Diagnosis of Diseases/Pests damage, identification of plant pathogens/pests/Weeds, management practices/maintenance of insect pests Diseases specimens/ Herbarium /museum and methods and techniques of forecasting of plant disease. • Provided scientific support to the Department of Horticulture viz., awareness creating programmes, field visits, training programmes and also in establishing demonstrations. Subject Matter Specialists of KVK is member of technical committee at taluk level for implementing and monitoring NHM programmes.	-

5.5 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 two 10 days training programme

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm): Nil

6.2 Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Details of production			Amount (Rs.)		Remarks
			Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals								
Paddy	July 2007	November 2007	MO-4	TFL Seeds	14.50	21456	**22910**	-

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

6.4 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	
1	Piggery unit (3+1)	Yorkshire	Production of piglets	-	-	-	Three female Pigs are in Pregnancy stage

6.5 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)
November 2007	00	00	---
December 2007	13	03	---
January 2008	00	00	---
February 2008	00	00	---
March 2008	12	01	---
April 2008	04	05	---
May 2008	38	02	---
June 2008	03	01	---
July 2008	00	00	---
August 2008	00	00	---
September 2008	17	02	---
Total	87	14	

Details on Rain Water Harvesting structure and micro-irrigation system: Proposal submitted for Approval

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

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

7.2 Utilization of funds under FLD on Oilseed *(Rs. in Lakh): Nil*

7.3 Utilization of funds under FLD on Pulses *(Rs. in Lakh):*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007 -08	
Inputs	-	52500.00	-	39373.00	13127.00
Extension activities	-	7500.00	-	7360.00	140.00
TA/DA/POL etc.	-	7500.00	-	7485.00	15.00
TOTAL	-	67500.00	-	54218.00	13282.00

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

7.5 a) Utilization of KVK funds during the year 2007 -08

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	24.00	2400000.00	1968934.00
2	**Traveling allowances**	1.00	100000.00	91012.00
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.17	217000.00	91012.00
B	POL, repair of vehicles, tractor and equipments	1.40	140000.00	128969.00
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.63	63000.00	56850.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.84	84000.00	83494.00
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.88	88000.00	79291.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.42	42000.00	26676.00
G	Training of extension functionaries	0.28	28000.00	28000.00
H	Maintenance of buildings	0.28	28000.00	27644.00
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	0.10	10000.00	5931.00
TOTAL (A)		**32.00**	**3200000.00**	**2712916.00**
B. Non-Recurring Contingencies				
1	**Works**	5.72	572000.00	571030.00
2	**Equipments including SWTL & Furniture**	-	-	-
3	**Vehicle** (Four wheeler/Two wheeler,	-	-	-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		**5.72**	**572000.00**	**571030.00**
C. REVOLVING FUND		-		
GRAND TOTAL (A+B+C)		**37.72**	**3772000.00**	**3283946.00**

b) Utilization of KVK funds during the year 2008 -09 (upto Sep. 2008)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	2200000.00	689000.00	973371.00
2	**Traveling allowances**	100000.00	50000.00	34100.00
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	22000.00	120000.00	63651.00
B	POL, repair of vehicles, tractor and equipments	130000.00	80000.00	55140.00
C	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	90000.00	40000.00	20303.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	80000.00	30000.00	8983.00
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	98000.00	98000.00	36965.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	32000.00	32000.00	13294.00
G	Training of extension functionaries	20000.00	10000.00	5030.00
H	Farmers Field School	20000.00	20000.00	-
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	10000.00	5000.00	2400.00
	TOTAL (A)	**3009000**	**1174000.00**	**1213237.00**

7.6 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 2005 to March 2006	89959.00	34236.00	13635.00	110560.00
April 2006 to March 2007	110560.00	70114.00	156261.00	24413.00
April 2007 to March 2008	24413.00	112631.00	117444.00	19600.00

8.0 Please include information which has not been reflected above (write in detail).

SUMMARY TABLES

1 Details of Technology assessment and refinement

Table 1A: Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	01	-	-	-	01	-	01	02	-	05
Integrated Pest Management		-	-	-	-	-	01	-	-	01
Integrated Disease Management		-	-	-	-	-	-	01	-	01
TOTAL	**01**	**-**	**-**	**-**	**01**	**-**	**02**	**03**	**-**	**07**

Table 1 B; Abstract on the number of technologies refined in respect of crops: Nil

Table 1 C: Abstract on the number of technologies assessed in respect of livestock enterprises: Nil

Table 1 D: Abstract on the number of technologies refined in respect of livestock enterprises : Nil

Table – 1 E Details of technology refined: Nil

2. Details of Frontline Demonstrations

Table – 2 A Front Line Demonstrations on Oilseed Crops: Nil

Table – 2 B Front Line Demonstrations on Pulse Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield (Qtl/ha)	Local Check (Qtl/ha)	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Black gram	Black gram production technology	30	15	4.74	3.76	25.81	28 Pods/Pl	16 pods/pl	10005	**1:2.30**

Table – 2 C Front Line Demonstrations on Cotton: Nil

Table – 2 D Front Line Demonstrations on Other Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield (Qtl/ha)	Local Check (Qtl/ha)	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Paddy	Zinc management	05	5.0	40.10	33.00	21.51	10.4 panicles /pl	5.4 Panicles / plant	19085	1:1.27
Maize	Introduction of variety	05	2.0	23.20	-	-	3.2cobs /pl		15840	1:1.32
Paddy	SRI method of Paddy cultivation	10	5.0	47.83	33.52	42.69	43.7 panicles/pl	15.00 panicles/pl	32676	1:2.72
Coconut	Integrated Nutrient Management	04	2.0	93 nuts/pl	51.2 nuts/pl	81.60	17.5 % mite Infestation	38.0 % mite Infestation	53320	1:4.40
Ginger	Introduction of high yielding variety	03	2.0	183.30	-	-	159 gm rhizome/hill	-	159950	1:2.39
Cashew	Nutrient Management	10	2.0	13.35	5.62	137.5	155.8 nuts per Kg	170.25 nuts per Kg	29055	1:3.60
Watermelon	Nutrient Management	11	2.0	341.36	202.0	68.99	4.13 Kg /fruit	3.50 Kg /fruit	142500	1:6.08
Arecanut	Root grub management	10	2.0	11.96	7.20	66.11	15.6% yellowing	42.7% yellowing	44995	1:2.16

Cashew	Tea mosquito management	05	2.0	10.50	5.88	78.57	1.2 shoot infected/sq.m^2	6.2 shoot infected/sq.m^2	19875	1:2.70

Table – 2 E Front Line Demonstrations on Other enterprises

Enterprise	Variety/ breed/Species/others	No. of farmers	No. of Units	Size of Unit	Performance Parameter indicators	Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
						Demon.	Local check		
Fisheries (Composite fish culture)	Catla	3	3	-	Yield (kg/ha)	2644.10	1600	65.26	Increase in yield and survival compared to local check
	Common carp			-	Yield (kg/ha)	42.10	30.0	40.33	

3. Details of training programmes conducted:

Table – 3 A Area-wise distribution of On + Off Campus Training Courses for Farmers and Farm Women (regular + sponsored)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
Crop Production								
Integrated Farming	3	70	18	88	6	3	9	97
Integrated Crop Management	3	52	56	108	10	3	13	121
Horticulture								
a) Vegetable Crops								
Production of low value and high volume crop	3	73	12	85	9	0	9	94
b) Fruits								
Cultivation of Fruit	**01**	**04**	**30**	**34**	**01**	**02**	**03**	**37**
d) Plantation crops								
Production and Management technology	3	79	19	98	15	3	18	116
Soil Health and Fertility Management								
Soil and water testing	3	106	144	250	20	28	48	298
Home Science/Women empowerment								
Value addition	5	86	181	267	6	16	22	289
Plant Protection								
Integrated Pest Management	01	40	02	42	04	01	05	47
Integrated Disease Management	12	312	103	415	72	11	83	498
Fisheries								
Integrated fish farming	01	33	02	35	02	00	02	37
Composite fish culture	2	30	10	40	4	3	7	47
Capacity Building and Group Dynamics								
Entrepreneurial development of farmers/youths	2	20	58	78	06	04	10	88
TOTAL	**39**	**905**	**635**	**1540**	**155**	**74**	**229**	**1769**

Table – 3 B Area-wise distribution of On + Off Campus Training Courses for Rural Youth (regular + sponsored + vocational) :Nil

Table – 3 C Area-wise distribution of On + Off Campus Training Courses for In-service Extension Personnel (regular + sponsored)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
Integrated farming	02	40	30	70	05	05	10	80

Table – 4 Numbers of Extension Activities and Beneficiaries

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	03	85	10	95	6	2	8	91	12	106
Exhibition	05	301	180	481	70	16	86	371	196	567
Method Demonstrations	07	193	239	432	-	-	-	193	239	432
Farmers Seminar	02	92	19	111	-	-	-	92	19	111
Lectures delivered	11	112	278	390	06	02	08	118	280	398
Advisory Services	50	43	07	50	-	-	-	43	07	50
Scientific visit to farmers field	174	139	35	174	-	-	-	139	35	174
Farmers visit to KVK	159	116	43	159	-	-	-	116	43	159
Diagnostic visits	12	22	00	22	-	-	-	22	00	22
Field visits	174	139	35	174	-	-	-	139	35	174
Exposure visits	04	231	17	248	04	02	06	235	19	254
Soil test campaigns	03	126	172	298	-	-	-	126	172	298

Celebration of important days (specify)										
World Food Day	01	10	25	35	-	-	-	10	25	35
Women in Agriculture Day	01	27	11	38	-	-	-	27	11	38
International Farmers Day	01	2	37	39	-	-	-	2	37	39
Newspaper coverage	94	• Activities of KVK								
Radio Programmes	10	• Activities of KVK • Role of KVK in transfer of technology • Acid Soil management • Cultivation of Agricultural crops • Cultivation of Horticultural crops • Jasmine cultivation • Koleroga management in Arecanut • Pest and disease management in Horticultural crops • Integrated fish farming • Importance technology transfer in Agriculture								
TV Programmes	01	• Management of Acid soil in coastal zone								
Publications										
Popular articles	07	• Potentiality of Processing Horticultural Crops in Coastal Karnataka • Integrated Farming Systems-Way to High Productivity • Need to control fungal attack? try Trichoderma • Koleroga management in Arecanut • Quick wilt management in Pepper • Insect management in Paddy • Reason for nut dropping in Arecanut and their control								
Extension Literature	08	• Profitable Crop-Kokum • Value added products of Banana • Krishi Vigyan Kendra- A ray of hope • Koleroga management in Arecanut • Quick wilt management in Pepper								

		• Cultivation of Patchouli in coastal zone • Aquarium for fabrication and its maintenance • Cultivation of Black gram

Table – 5 A Productions of Seeds

Sl. No.	Crop	Quantity (qtl.)	Value (in Rs.)	Provided to No. of Farmers
I. CEREALS				
1	Paddy	14.50	22910	50

SUMMARY

Sl. No.	Crop	Quantity (qtl.)	Value (in Rs.)	Provided to No. of Farmers
I	**CEREALS**	14.50	22910	50
TOTAL		14.50	22910	50

Table – 5 B Production of planting/seedling materials of Fruits/Vegetables/Forest Species

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers

1	Plantation crops	Cashew	Ullal-1	6000	84000	52

SUMMARY

Sl. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	Plantation crops	6000	84000	52
	TOTAL	**6000**	84000	52

Table –5 C Production of bio products : Nil

Table 5 D Livestock materials

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Piggery unit (3+1)	Production of piglets	Yorkshire	-	-	-	Three female Pigs are in Pregnancy stage

Summary

Sl. No.	Type	Breed	Quantity	Value (Rs.)	Provided to No. of Farmers

			(Nos	**Kgs**		
Piggery unit (3+1)	Production of piglets	Yorkshire	-	-	-	Three female Pigs are in Pregnancy stage

KRISHI VIGYAN KENDRA (D.K), KANKANADY, MANGALORE

DETAILED PROFORMA FOR OFT AND FLD CONDUCTED DURING 2007-08

A. On Farm Trial

1. Use of RHA in paddy as a source of silicon and Phosphorous

1) **Production system:** Rainfed/Protective irrigation
2) **Problem Definition:** Improper Nutrient management and Non availability of phosphorous due to its fixation in soil leads to lower yield
3) **Title of the Technology Assessed :** Use of RHA in paddy as a source of silicon and Phosphorous
4) **Thematic area:** - Acidic Soils reclamation, Nutrient Management
5) **Details of technologies for assessment**

Category	Source of Technology	Technology details
Technology Option 1	-	FYM: 1.5-2.0 ton/ha Fertilizer: 125-150 kg of complex fertilizer
Technology Option 2	U.A.S., Bangalore	FYM:10 ton/ha, Recommended Dose of NPK (60:30:45 kg/ha)
Technology Option 3	U.A.S., Bangalore	FYM:10 ton/ha, Recommended Dose of NK + RHA 2 tones/ ha

6) **Production system and thematic area:** Rainfed/Protective irrigation and Acidic Soils reclamation, Nutrient Management

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

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	Qtl./ha	BC Ratio	Grains/ Panicle	Qtl./ha	BC Ratio	Grains/ Panicle	Qtl./ha	BC Ratio
1	Prasad Kumar	Padukonaje	135	34.00	1:1.28	146	39.50	1:1.49	183	44.50	1:1.61
2	Vasanth Madival	Kajekaru	115	32.00	1:1.20	137	37.50	1:1.41	172	42.75	1:1.68
3	Gangadhar P.	Aryapu	120	30.37	1:1.14	139	36.50	1:1.37	172	38.50	1:1.45
4.	Gopal Kambalkatta	Aryapu	180	28.00	1:1.05	192	35.00	1:1.32	160	40.00	1:1.51
5.	Rajesh	Kilpady	135	29.00	1:1.09	165	34.00	1:1.28	155	42.00	1:1.58
		Average	**137**	**30.60**		**155.8**	**36.50**		**168.4**	**41.50**	

8) Final recommendation for micro level situation: Application of RHA 2 tones per ha with recommended dose of fertilizer increased in the yield and available Phosphorous content in the soil. Hence, technology well suited for coastal acidic soils.

9) Constraints identified and feedback for research: Supply of Rice hull Ash from the Rice mills incurred more transportation expenditure. Application of RHA 2 tones per ha with recommended dose of fertilizer can be recommended for micro level situation.

10) Process of farmer's participation and their reaction: Farmers appreciated the technology and desired to adopt the same.

2. Micro Nutrient Management in Arecanut (Copper Ore Tailing)

1. **Production system**: Rainfed/ protective irrigation
2. **Problem Definition:** Improper Nutrient management, Micro nutrient deficiency in soil.
3. **Title of the Technology Assessed:** Micro Nutrient Management in Arecanut (Copper Ore Tailing)
4. **Thematic area:** - Micro Nutrient Management.
5. **Details of technologies for assessment**

Category	Source of Technology	Technology details
Technology Option 1	-	Variety: Mangala FYM:15-20 kg/pl, Green manure: 10kg/pl, Complex fertilizer @ 150 to 200 gm/pl., yield loss: 15-20%
Technology Option 2	U.A.S., Bangalore	Variety: Mangala, Green manure: 20kg/pl, FYM: 20 kg/pl, NPK:150:60:210 gm /pl, $ZnSO_4$: 20 g/pl, $MgSO_4$: 200 g/pl, Lime: 300 g/pl, Borax: 25 g/pl.
Technology Option 3	U.A.S., Dharwad	Variety: Mangala Green manure: 20 kg/pl, FYM: 20 kg/pl, Borax: 25 g/pl, COT: 2 kg/pl, Lime: 300 g/pl, NPK: 150:60:210 gm /pl

6. **Production system and thematic area**: Rainfed/protective irrigated and Micro Nutrient Management.

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

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		
			Chali Yield Kg/pl.	Early Nut drops Kg/pl.	Nut Splitting Kg/pl.	Chali Yield Kg/pl.	Early Nut drops Kg/pl.	Nut Splitting Kg/pl.	Chali Yield Kg/pl.	Early Nut drops Kg/pl.	Nut Splitting Kg/pl.
1.	Vittala Rai	Balanja	1.15	1.15	0.75	2.01	1.00	0.50	2.20	0.25	0.38
2.	Chadra Shekhar	Kondana	1.65	1.17	0.85	2.40	1.10	0.58	2.50	0.35	0.25
3.	Radhakrishna B.	Guruvayanakere	1.65	1.19	1.00	2.50	0.90	0.65	2.55	0.20	0.42
4.	Leena Rodrigas	Eshwarkatte	1.85	1.20	0.86	2.44	1.00	0.65	2.53	0.28	0.53
5.	Prasad Kumar	Padukonaje	1.73	1.28	1.10	2.58	1.00	0.65	2.63	0.20	0.35
6.	A.S. Manmatha	Ajjawara	1.81	1.15	0.75	2.53	0.90	0.50	2.66	0.35	0.25
7.	Monappa Gowda	Ajjawara	1.88	1.18	0.85	2.55	1.10	0.65	2.70	0.40	0.35
8.	Ramesh Bharanya	Panaje	1.61	1.12	0.95	2.00	1.05	0.70	2.42	0.20	0.48
9.	Padmanabha Borker	Panaje	1.74	1.14	0.85	2.08	1.00	0.68	2.35	0.50	0.35
10.	Narayana Rai	Panaje	1.80	1.00	1.00	2.33	0.50	0.50	2.44	0.10	0.25
		Average	**1.68**	**1.15**	**0.89**	**2.34**	**0.95**	**0.60**	**2.49**	**0.28**	**0.36**

8. Final recommendation for micro level situation: Application of COT (2kg/pl.) with recommended dose of fertilizer results in reduction in the nut drop and nut splitting. Hence, the technology is well suited for micro level situation.

9. Constraints identified and feedback for research: Non availability of Copper Ore Tailing in the local market.

10. Process of farmer's participation and their reaction: Farmers felt that yield in refined practice is better over traditional method and slightly higher than the improved method. And reduction in the nut drop and nut splitting was observed due to application of COT, which is the mixture of micro nutrients.

3. Integrated Nutrient Management in Arecanut

1. **Production system**: Rainfed/ Protective irrigation
2. **Problem Definition**: Poor nutrient management practices resulted in lower yield.
3. **Title of the Technology Assessed:** Integrated Nutrient Management in Arecanut
4. **Thematic area:** Nutrient management
5. **Details of technologies for assessment**

Category	Source of Technology	Technology details
Technology Option 1	-	FYM:15-20 kg/pl, Green manure; 10kg/pl, Complex fertilizer @ 150 to 200 gm/pl.
Technology Option 2	UAS, Bangalore	Green manure: 20kg/pl, FYM-20 kg/pl, NPK: 150:60:210 gm /pl, $ZnSO_4$: 20 g/pl, $MgSO_4$: 200 g/pl, Lime: 300 g/pl, Borax: 25 g/pl
Technology Option 3	CPCRI, Kasargod	Green manure-20 kg/pl, FYM-20 kg/pl, Lime: 300 g/pl, $ZnSO_4$- 20 g/pl, $MgSO_4$: 200 g/pl, Borax: 25g/pl, Neem cake: 1 kg/pl, Compost enriched with (*Azospirillum* 20 gm + PSB 20 gm /pl),NPK: 50 % of N,75 % of P& 100% K of Recommended dose of fertilizer (75:45:210 gm /pl)

6. **Production system and thematic area:** Protective irrigation and nutrient management.

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

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		
			Fresh Bunch weight(kg/pl)	Number of nut drops/pl	Chali yield (kg/pl)	Fresh Bunch weight(kg/pl)	Number of nut drops/pl	Chali yield (kg/pl)	Fresh Bunch weight(kg/pl)	Number of nut drops/pl	Chali yield (kg/pl)
1.	Ramachndra Bhat	Panaje	8.00	18	1.12	10.64	2.30	1.95	12.04	2.10	2.25
2.	Vishnu Bhat	Nidpalii	10.50	13	1.15	12.60	2.00	2.025	12.88	1.70	2.32
3.	Jagmohan Rai	Panaje	8.50	12	1.35	10.92	3.00	1.875	11.76	2.60	2.02
4.	Venkataramana Mulya	Ajjavar	8.00	19	1.10	9.80	3.10	1.50	11.20	2.90	2.10
		Average	**8.75**	**15.5**	**1.18**	**10.99**	**2.60**	**1.83**	**11.97**	**2.32**	**2.17**

8. Final recommendation for micro level situation: Suitable for sustainable production of Arecanut by reducing inorganic fertilizers and hence, this technology is suited under micro level situation.

9. Constraints identified and feedback for research: Leaching of nutrients, soil acidity and nutrient deficiencies were observed and hence, use of slow releasing fertilizers in Arecanut is very much required and hence, this can be taken for research.

10. Process of farmer's participation and their reaction: Farmers felt that yield in refined practice is better over traditional method and slightly higher than the improved method. But in long run assessed practice may help to maintain the soil health and sustain the yield.

4. Integrated Nutrient Management in Jasmine

1. Production system: Rainfed/ protective irrigation

2. Problem Definition: Poor nutrient management resulted in low yield

3. Title of the Technology Assessed: Integrated Nutrient Management in Jasmine

4. Thematic area: Nutrient management.

5. Details of technologies for assessment:

Category	Source of Technology	Technology details
Technology Option 1	-	FYM : 10 kg, Groundnut cake :150 gm/pl, Burnt soil:1 kg, No phosphorus and potash application, Neem cake: 0.5kg /pl
Technology Option 2	U.A.S. Bangalore	Organic manure: 20 kg /pl, Recommended dose of fertilizer 120:240:240 gm NPK/pl
Technology Option 3	U.A.S. Bangalore	Neem cake: 0.5 kg/pl, Lime: 0.5 kg/pl, Enriched Bio compost 20 kg (20g. *Azospirillum* + 20g. PSB/pl), 50 % N through groundnut cake, 50%N, 75% of P& 100% K of Recommended Dose of Fertilizer

6. Production system and thematic area: Irrigated and nutrient management

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

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		
			Yield (kg/pl)	Yield (ton/ha)	B.C. Ratio	Yield (kg/pl)	Yield (ton/ha)	B.C. Ratio	Yield (kg/pl)	Yield (ton/ha)	B.C. Ratio
1.	Veenakiran Rai	Ajjavar	1.50	3.75	1:4.60	1.95	4.87	1:5.53	1.98	4.95	1:5.42
2.	Vittal Alva	Ajjavar	1.50	3.75	1:4.60	2.10	5.25	1:5.96	2.13	5.32	1:5.83
3.	Kamala	Jalsoor	1.40	3.50	1:4.30	2.30	5.00	1:5.68	2.03	5.09	1:5.55
4.	Ravi. N	Jalsoor	1.60	4.00	1:4.90	1.90	5.75	1:6.53	2.32	5.80	1:6.35
5.	Alvin Lasrado	Meramajalu	1.50	3.75	1:4.60	2.30	4.75	1:5.39	1.93	4.82	1:5.28
6.	Edverd	Meramajalu	1.70	4.25	1:5.26	1.85	5.75	1:6.53	2.30	5.75	1:6.30
7.	Jaganath B	Meramajalu	0.90	2.25	1:2.78	2.15	4.62	1:5.25	1.88	4.70	1:5.15
8.	Padmashree	Padukonaje	1.50	3.75	1:4.60	2.34	5.37	1:6.10	2.19	5.47	1:6.12
9.	Vidya	Puttige	1.75	4.37	1:5.40	2.05	5.85	1:6.64	2.35	5.87	1:6.73
10.	Lorence Miranda	Puttige	1.00	2.50	1:3.90	2.10	5.12	1:5.82	2.08	5.20	1:5.84
		Average	**1.43**	**3.58**		**2.10**	**5.23**		**2.19**	**5.29**	

* In Dakshina Kannada District majority (80%) of jasmine plots looks yellowish due to nutrient deficiency but with the adoption of assessed technology 2 and 3 had shown greenish wealthy foliage when compared to traditional practice.

8. Final recommendation for micro level situation: Technology very much suitable for small holding farmers at micro level situation.

9. Constraints identified and feedback for research: Leaching loss of nutrients was observed therefore research on slow releasing fertilizer use in jasmine is need to be taken up.

10. Process of farmer's participation and their reaction: Farmers convinced about the assessed technology. Since, this technology performed better over traditional practice and slightly higher than the improved method. Farmers also felt that this technology helps to improve the soil health for sustainable production in long run.

5. Nutrient Management in Ash gourd

1. Production system : Protective irrigation

2. Problem Definition **:** Imbalance use of fertilizers resulted in lower yield.

3. Title of the Technology Assessed **:** Nutrient Management in Ash gourd

4. Thematic area **:** Nutrient management

5. Details of technologies for assessment

Category	Source of Technology	Technology details
Technology Option 1	-	FYM : 5 t/ha
Technology Option 2	U.A.S., Bangalore	FYM : 12.5 t/ha, 50:50:0 kg NPK/ha
Technology Option 3	U.A.S., Bangalore	FYM : 12.5 t/ha, 50:50:70 kg NPK/ha

6. Production system and thematic area Protective irrigation and nutrient management

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

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	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.	Manjunath Mulya	Kurnadu	3.3	3.3	12.0	3.6	4.2	18.0	4.30	4.8	23.
2.	Francis Pinto	Bajpe	3.45	3.5	15.0	3.8	4.4	19.0	4.2	4.7	24.0
3.	Chandrashekar	Kondana	3.6	3.8	16.0	3.95	4.3	19.4	4.5	5.1	26.0
4.	Udayakumar Shetty	Surinje	3.5	3.85	17.0	3.85	4.83	22.0	4.3	5.35	25.0
5.	Prasad Kumar	Padukonaje	3.55	3.4	14.0	3.9	4.75	21.0	4.6	5.2	25.0
6.	Taranath	Badaga Edapadav	3.4	3.6	15.0	3.7	4.65	20.0	4.4	5.0	24.0
7.	Ashok Kumar	Badaga Ekkar	3.9	3.45	14.0	4.2	4.80	22.0	4.8	5.3	26.0
8.	K. Monappa	Polali	3.8	3.65	15.0	4.1	4.7	21.0	4.7	5.5	27.0
9.	Krishnavolla	Polali	3.85	3.9	17.0	4.3	4.9	23.0	4.85	5.4	27.0
10.	Vishnu Bhat	Nidpalli	3.4	3.64	15.0	3.8	4.55	22.0	4.2	4.73	24.0
		Average	**3.57**	**3.52**	**15.0**	**3.92**	**4.60**	**20.74**	**4.48**	**5.10**	**25.10**

8. 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 and Hence, this technology is suitable to micro level situation.

9. Constraints identified and feedback for research: Leaching loss of nutrients.

10. Process of farmer's participation and their reaction: Farmers have actively participated in implementation and evaluation of the technology. They convinced that application of potash as a nutrient source along with the recommended dose of fertilizers resulted higher yield with better keeping quality. Farmers agreed to adopt and disseminate the same technology to neighboring farmers.

6. Management of Inflorescence die back disease in Arecanut

1. Production system **:** Rainfed/ protective irrigation

2. Problem Definition **:** Inflorescence die back is a major disease causes 30-40% yield loss

3. Title of the Technology Assessed : Management of Inflorescence die back disease in Arecanut

4. Thematic area : Inflorescence die back disease.

5. Details of technologies for assessment

Category	Source of Technology	Technology details
Technology Option 1	-	Spraying of Bavistin 2 gm /ltr
Technology Option 2	U.A.S., Bangalore	• Spraying of Mancozeb 2.5 gm/ltr. at the time of opening of female flower
Technology Option 3	U.A.S., Bangalore	• Sanitation Lime-300 gm Potash-400 gm Boron- 25 gm Zinc Sulphate-20 gm • Spraying of Mancozeb 2.5 gm/ltr at the time of opening of female flower

6. Production system and thematic area Rainfed/ protective irrigation and Inflorescence die back disease

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

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 (Qtl./ha)	No. of Inflorescence infected /pl	% Disease incidence	Yield (Qtl./ha)	No. of Inflorescence infected/pl	% Disease incidence	Yield (Qtl./ha)
1.	Srinivasbhatt	Nidpalli	04	50	11.88	02	25.0	19.05	0	12.5	20.81
2.	AnajeGaneshrai	Nidpalli	03	37.5	16.08	01	12.5	20.31	01	12.5	21.21
3.	VisweswaraBhat	Nidpalli	03	37.5	16.08	01	12.5	20.35	00	00	22.01
4.	Mahesh	Panaje	03	37.5	16.81	01	12.5	20.85	01	12.5	23.47
5.	Gopalkrishna	Panaje	04	50	16.00	01	12.5	21.45	00	00	23.51
6.	Prasadkumar	Padukonaje	03	37.5	16.95	01	12.5	21.65	00	00	23.51
7.	Felicsrodrigous	Puttige	03	37.5	18.38	02	25.0	19.15	01	12.5	25.01
8.	Kesav Anchan	Paladka	04	50.0	15.21	02	25.0	19.25	01	12.5	25.81
9.	Chandrashekar	Kondana	04	50.0	13.78	02	25.0	20.30	01	12.5	26.21
10.	Sadanandashetty	Sajeepamuda	03	37.5	20.28	01	12.5	21.55	00	00	24.55
		Average	**3.4**	**42.5**	**16.08**	**1.4**	**17.5**	**20.35**	**0.6**	**7.5**	**23.51**

8. Final recommendation for micro level situation : Soil application of recommended dose of potash, Zinc, boron along with recommended spray schedule at the time of opening of female flowers found effective in disease management.

9. Constraints identified and feedback for research: Nil

10. Process of farmer's participation and their reaction: Farmers expressed the happiness about the demonstrated technology and there was low disease incidence observed when compared to Traditional practice.

7. White fly management in Jasmine

1. **Production system** : Rainfed/ protective irrigation
2. **Problem Definition** : Severity of Whitefly incidence during summer resulted in low yield
3. **Title of the Technology Assessed** : White fly management in Jasmine
4. **Thematic area** : White fly incidence
5. **Details of technologies for assessment**

Category	Source of Technology	Technology details
Technology Option 1	-	Monocrotophos-1ml or 2ml/ltr. Some times mixing of 2-3chemicals at a time and sprayed at severe infestation
Technology Option 2	U.A.S., Bangalore	Spraying of Melathian 50 EC 2ml/ltr. during pest incidence
Technology Option 3	U.A.S., Bangalore	Spraying of Neem oil 4ml/ltr. during March Spraying of Triazophos 2ml/ltr during April

6. **Production system and thematic area** Rainfed/ protective irrigation and White fly incidence

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

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 insect colony/sq.ft.	% sooty mould	Yield (t/ha)	No. of insect colony/sq.ft.	% sooty mould	Yield (t/ha)	No. of insect colony/sq.ft.	% sooty mould	Yield (t/ha)
1.	Udayabaskar	Sentyar	5	43.20	3.76	3	26.71	4.16	2	13.11	4.55
2.	Sridevi S.Rai	Belma	6	50.31	3.38	4	28.41	4.15	1	14.00	4.37
3.	Savithri S.	Parande	5	47.44	3.47	3	27.21	4.16	1	12.50	4.56
4.	Chandrahas	Permude	4	40.11	4.37	2	25.39	4.20	0	13.51	4.40
5.	Harshchandra	Parande	6	53.21	1.87	4	29.64	3.75	1	12.00	5.62
6.	Vidhya	Puttige	6	49.81	3.47	4	29.36	4.15	2	13.00	4.55
7.	Lowrence Mirinda	Puttige	5	41.88	4.37	3	24.28	5.00	1	13.51	4.37
8.	Padmashree	Padukonaje	6	53.33	1.87	3	29.61	3.75	0	14.51	4.40
9.	Vittal Alva	Ajjawara	5	50.13	3.38	2	26.11	4.20	1	12.00	4.56
10.	Monappa Bangera	Mudperara	5	47.11	3.76	3	24.56	5.00	2	11.00	5.62
		Average	**5.3**	**47.65**	**3.37**	**3.1**	**27.12**	**4.25**	**1.1**	**12.91**	**4.70**

8. Final recommendation for micro level situation : Timely spraying of Triazophos 2ml/ltr. and Neem oil 4ml/ltr. is proven to be manage whitefly incidence.

9. Constraints identified and feedback for research : Proper canopy management is not been practiced.

10. Process of farmer's participation and their reaction : Farmers appreciated the assessed technology and it has proven to be effective over traditional method by reducing whitefly infestation.

B. Front Line Demonstration

1. Zinc Management in Paddy

1) **Production system:** Rainfed/protective irrigation
2) **Problem Definition:** Chaffy grains in paddy due to low zinc content in soil, Improper Nutrient Management
3) **Title of the Technology demonstrated:** Zinc Management in Paddy
4) **Thematic area :** Acidic Soils, Micro Nutrient Management
5) **Year of release of the technology or Year of assessment: --**
6) **Source of technology : U.A.S., Bangalore**
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Panicles / plant	Grains/panicle	yield qtl/ha	% increased in yield
1	Prasad Kumar	Padukonaje	10	125	42.50	11.00
2	Venugopal Alva	Kaikamba	08	150	38.25	9.70
3	Narahari Prabhu	Mooduperar	10	180	39.25	12.94
4.	Krishnappa	ShiShila	12	110	40.15	16.38
5.	Gangadhar P.	Aryapu	12	100	40.37	16.00
		Average	**10.4**	**133**	**40.10**	

8) **Final recommendation for micro level situation:** Application of Zinc Sulphate 20kg/ha, increased paddy yield to the extent of 12 to 15%.

9) **Constraints identified and feedback for research:** Nil

10) **Process of farmers participation and their reaction:** Less Chaffy grains with low disease and pest incidence was observed and farmers happy with technology.

2. SRI Method of Paddy Cultivation

1. **Production system:** Rainfed/Protective irrigation
2. **Problem Definition:** Improper water management and lack of knowledge on cultivation paddy under SRI method
3. **Title of the Technology demonstrated:** SRI Method of Paddy Cultivation
4. **Thematic area:** Water management
5. **Year of release of the technology or Year of assessment: --**
6. **Source of technology: U.A.S., Bangalore**
7. **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Panicles / plant	Grains/ panicle	yield qtl/ha	BC ratio
1.	Purushotham	Devachalla grama	38	215	41.42	1:2.5
2.	Vishwanatha Rai	Peruvaje	42	225	45.71	1:2.23
3.	Ramesh Shetty	Peruvaje	45	222	51.42	1:2.64
4.	Sulaiman	Peruvaje	40	218	40.00	1:1.83
5.	Hirekumar	Mundody	47	245	57.00	1:3.00
6.	Suresh Rai	Enmoor	42	220	51.42	1:2.64
7.	Lingappa Gowda	Mandekol	51	250	60.00	1:3.25
8.	Mamatha Rai	Ajjawara	48	240	54.28	1:2.84
9	Duggappagowda	Devachala	42	220	31.42	1:2.64
10	Sheshappa rai	Peravaje	42	225	45.71	1:2.20
			43.70	**228**	**47.83**	

8. **Final recommendation for micro level situation :** Technology is well suited to situation where water availability is low**.**
9. **Constraints identified and feedback for research :** Nil
10. **Process of farmer's participation and their reaction:** Farmers accepted the technology at micro level situation.

3. Introduction of Baby corn to Coastal Zone

1. **Production system:** Multiple cropping systems with assured irrigation
2. **Problem Definition:** Lack of knowledge on suitability and productivity of the Crops
3. **Title of the Technology demonstrated:** Introduction of to Baby corn Coastal Zone
4. **Thematic area:** Introduction of Baby corn to Coastal Zone, lack of knowledge on cultivation of maize.
5. **Year of release of the technology or Year of assessment:--**
6. **Source of technology:** U.A.S., Bangalore
7. **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Yield(qt/ha)	Baby length(inch)	Wt of baby(gm)	No of cobs/pl
1	Ravindra	Katipalla	20	3	22	3
2	Umesh Shetty	Delanthabettu	23	4	25	3
3	Ivadhana Rao	Surathkal	25	4	27	3
4.	Madhava Prabhu	Cheliyar	21	5	20	3
5.	Kanthappa Madival	Delanthabettu	27	4	28	4
		Average	**23.2**	**4.0**	**24.4**	**3.2**

8. Final recommendation for micro level situation: Maize **(**Baby corn) can be grown in coastal zone as a alternative crop in Rabi/Summer season.

9. Constraints identified and feedback for research: -Large scale demonstrations are needed for introduction of baby corn for wider publicity.

10. Process of farmers participation and their reaction: Farmers appreciated by introduction of Baby corn in coastal zone as an alternative crop. According to farmers opinion, cost of cultivation is less when compared to paddy cultivation

4. Integrated Nutrient Management in Coconut

1. Production system : Rain fed/Protective irrigation

2. Problem Definition : Poor nutrient management practices resulted in lower yield with more mite infestation.

3. Title of the Technology demonstrated : Integrated Nutrient Management in Coconut.

4. Thematic area : Nutrient management.

5. Year of release of technology : --

6. Source of technology : CPCRI, Kasargod

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Mite infestation (%)	Premature nut drop (Nuts/pl)	Nut split and drop (Nuts/pl)	Yield (Nuts/pl)
1.	Nagesh gouda	Nidpalli	18	17	2.2	92
2.	Chandrashekhar Gatti	Kondana	20	20	3.0	88
3.	Dr. N.R.Shetty	Gramchavadi	17	10	2.0	95
4.	Chandrashekhar D.K.	Ajjavar	15	9	1.8	97
		Average	**17.5**	**14**	**2.25**	**93.0**

8. Final recommendation for micro level situation: Proper nutrient management will enhance yield with reduced mite infestation.

9. Constraints identified and feedback for research: This technology proves to be effective in long run.

10. Process of farmers participation and their reaction: Accepted the integrated nutrient management through organic and inorganic fertilizers which has helped to increase the yield when compared to traditional method. Farmers expressed that demonstration had shown less mite infestation.

5. Introduction of high yielding Ginger Var. Himachal

1. Production system : Rain fed/Protective irrigation.

2. Problem Definition : Cultivation of locally available low yielding varieties.

3. Title of the Technology demonstrated : Introduction of high yielding Ginger Var. Himachal

4. Thematic area : Popularization of high yielding varieties.

5. Year of release of technology : --

6. Source of technology : U.A.S., Bangalore.

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated		
			Number of tillers per plant	Weight of rhizome(g)/hill	Yield (Qtl /ha)
1.	Harishchandra Naik	Nellurukembraje	12	144	160
2.	Lokayya Naik	Nellurukembraje	15	171	190
3.	Shivanand Pooojari	Mittabagilu	13	162	180
Total			**13.33**	**159**	**183.3**

8. Final recommendation for micro level situation: This short duration variety is very much suitable at micro level situations.

9. Constraints identified and feedback for research: Nil

10. Process of farmer's participation and their reaction: Farmers expressed happiness about the variety which is high yielding and short duration when compared to locally grown, it require large scale demonstration for its popularization.

6. Nutrient Management in Cashew

1. Production system : Rain fed

2. Problem Definition : No nutrient management resulted in low yield with poor quality nuts.

3. Title of the Technology demonstrated : Nutrient Management in cashew

4. Thematic area : Nutrient management

5. Year of release of technology : --

6. Source of technology : U.A.S., Bangalore

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Nut size (cm^2)	Number of nuts per Kg	Yield (Kg / plant)	Yield (Qtl / ha)
1.	Shashidar S. K.	Panaje	6.20	160	7.42	13.00
2.	Raghunath Patali	Panaje	5.94	165	6.28	11.00
3.	Kunda Naik	Panaje	7.0	150	8.0	14.00
4.	Godfree Fernandies	Benjanapadavu	6.3	159	8.57	15.00
5.	Sebastin Rodrigus	Amunje	7.2	140	7.42	13.00
6.	Vigbart Naruna	Benjanapadavu	7.5	145	7.42	13.00
7.	Piyush Prabhu	Puttige	7.2	155	8.57	15.00
8.	Lorence Mirinda	Puttige	6.12	166	8.28	14.05
9.	Lokesh Rai	Asletti	6.4	158	6.85	12.00
10.	Devadas K. S.	Ivalattur	6.0	160	7.42	13.00
Average			**6.58**	**155.8**	**7.62**	**13.35**

8. Final recommendation for micro level situation: Nutrient management along with protective irrigation during flowering enhances flower induction and fruit set and hence, this technology very much suited for micro level situation.

9. Constraints identified and feedback for research: Nil

10. Process of farmer's participation and their reaction: Farmers expressed happiness about demonstration by saying cashew can be grown profitable one by good nutrient management practice

7. Nutrient Management in Watermelon

1. Production system **:** Protective irrigation
2. Problem Definition **:** Poor nutrient management practices resulted in low yield.
3. Title of the Technology demonstrated **:** Nutrient Management in Watermelon
4. Thematic area : Nutrient Management
5. Year of release of technology **: --**
6. Source of technology **:** U.A.S., Bangalore
7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Average number of fruits / plant	Average fruit weight(Kg)	Yield per plant (Kg)	Yield (Qtl. / ha)
1.	Padmanabha Bhat	Polali	2.52	4.42	11.13	360
2.	Chandrashekar. P	Polali	2.55	4.35	11.09	340
3.	Annu Mulya	Polali	2.90	3.20	9.28	310
4.	Krishna Holla	Polali	2.80	3.87	10.83	300
5.	Sadanand Rai	Kariyangala	2.87	3.80	10.90	320
6.	Achyuth Kamath	Mundkur	2.90	3.80	11.02	325
7.	Devadas Kamath	Mundkur	3.0	3.70	11.09	330
8.	Narayan Shetty	Malali	2.50	4.82	11.09	330
9.	Vinayak Shetty	Malali	2.30	4.86	11.10	390
10.	Krishna Sapaliga	Malali	2.30	4.80	11.22	400
11.	Yeshwanth Pujari	Malali	2.85	3.85	10.87	350
Average			**2.68**	**4.13**	**10.87**	**341.36**

8. Final recommendation for micro level situation: Better nutrient management practices helped to increase the yield.

9. Constraints identified and feedback for research: Nil

10. Process of farmer's participation and their reaction: Farmers appreciated the demonstrated technology which has helped to increase the yield and quality when compared to traditional practice.

8. Root grub management in Arecanut

1. Production system : Rain fed/Protective irrigation

2. Problem Definition : Root grub infestation in Arecanut results in reduction of yield and its severity causes death of plants

3. Title of the Technology demonstrated : Root grub management in Arecanut

4. Thematic area : Root grub infestation

5. Year of release of technology : --

6. Source of technology : UAS, Bangalore

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			Percent yellowing	No. of grubs/pl	No. of Bunches/pl	Yield (Qtl/ha)
1	Gangadhar	Sulkerimogaru	20	05	04	10.71
2	Ganesh kumar	Sulkerimogaru	15	04	03	11.00
3	Anand Anchan	Sulkerimogaru	13	04	04	12.96
4	Vittal Rai	Balanja	18	08	04	10.96
5	Vedappa gowda	Siruru	24	06	03	10.31
6	Chandrashekar	Kollamogaru	10	03	04	13.61
7	Padmanabha	Muduperaru	15	03	03	12.81
8	Rajesh shetty	Kuppepadavu	14	04	04	12.92
9	Sipriyan Kutina	Kuppepadavu	15	04	05	11.11
10	Shashiprabha	Kuppepadavu	12	02	03	13.21
		Average	**15.6**	**4.3**	**3.7**	**11.96**

8. Final Recommendation: Timely application of Phorate 25 gm/pl and Drenching of Chloropyriphos 5 ml/ltr will reduce the Root grub infestation. This technology is very much suitable for micro level situation.

9. Constraints identified and feedback for research: Severity of grub infestation at advanced stage is difficult to manage.

10. Process of farmer's participation and their reaction: Farmers expressed that demonstrated technology has proved effective in management of Root grub infestation.

9. Tea mosquito management in Cashew

1. Production system : Rain fed

2. Problem Definition : Tea mosquito infestation during flowering season resulted in heavy crop loss to extent of 60-80%.

3. Title of the Technology demonstrated : Tea mosquito management in Cashew
4. Thematic area : Tea mosquito Infestation
5. Year of release of technology : --
6. Source of technology : UAS, Bangalore

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated			
			No. of Shoots infected /sq.m^2	Per cent Dieback disease incidence	Per cent Shoots infected	Yield (Qtl/ha)
1	Veerappa Saliyana	Machina	00	00	00.00	11.50
2	Gangadhara	Aryapu	01	10	12.50	11.00
3	Shekar Rai	Aryapu	01	08	12.50	10.50
4	Venugopal Alwa	Kaikamba	02	14	25.00	10.50
5	Volter Rodrigous	Kaikamba	02	10	25.00	09.00
		Average	**1.2**	**8.4**	**15.00**	**10.50**

8. Final Recommendation: Spraying of Recommended chemicals during flowering stage will reduce the Tea mosquito infestation and hence, this technology is very much suitable for micro level situation.

9. Constraints identified and feedback for research: Nil

10. Process of farmers participation and their reaction: Farmers expressed the happiness about the demonstrated technology and it has proven to be effective to manage Tea mosquito infestation.

10. Black gram production technology

1. Production system : Rain fed

2. Problem Definition : Non utilization of residual moisture after paddy cultivation

3. Title of the Technology demonstrated : Black gram production technology
4. Thematic area : Utilization of residual moisture
5. Year of release of technology : --
6. Source of technology : UAS, Bangalore

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated	
			Yield per ha (Qtl / ha)	No. of pods per plant
1.	Srinivas Rao	Puttige	4.96	28
2.	Nagaraja Parkera	Puttige	5.06	32
3.	Usha Shailendra Raj	Puttige	4.96	29
4.	Shantha Naik	Puttige	5.0	24
5.	Dinesh Naik	Puttige	5.02	33
6.	Padmanabha Bhat	Puttige	5.16	35
7.	B. Nagaraja Rao	Puttige	4.88	28
8.	Srinivas Upadyaya	Puttige	4.80	26
9.	Monappa Naik	Puttige	4.58	28
10.	Koraga Naik	Puttige	4.86	29
11.	Kamala Shetty	Puttige	4.66	26
12.	Rajeev Shetty	Puttige	4.8	28
13.	P. Balakrishna Rao	Puttige	4.2	23
14.	Muddu Shetty	Puttige	4.75	28
15.	Alisa Bai	Puttige	4.96	29
16.	Girish Bhat	Puttige	5.12	34
17.	Ganesh Bhat	Puttige	4.66	26
18.	Victor Curdoza	Puttige	4.72	26
19.	Chandrashekar Shetty	Puttige	4.78	30
20.	Yadav Koriya	Balathila grama	4.25	32
21.	Ramanna Gowda	Belalu	4.62	30

22.	Rajesh	Kilenjar	4.23	28
23.	Seena Pujari	Bollambala	4.74	27
24.	Narasiha Pujari	Panaje	4.28	26
25.	Srinivas Bhagavath	Nidpalli	4.66	28
26.	Lyanth Pujari	Bollambala	4.8	26
27.	Narayan Golitre	Nidpalli	4.95	24
28.	Ramesh Bharanya	Panaje	4.65	26
29.	Srinivas Bhat	Nidpalli	4.68	25
30.	Vishnu Bhat	Panaje	4.30	26
		Average	4.74	28

8. Final Recommendation: Growing of Black gram will enhances their economic level as well as soil fertility status by utilizing residual moisture

9. Constraints identified and feedback for research: Nil

10. Process of farmers participation and their reaction: Farmers expressed there view by saying that Black gram can be grown profitably by utilizing residual moisture and being a legume this also helps to improve the soil fertility.

10. Composite Fish Culture

1. Production system : Seasonal Farm Pond

2. Problem Definition : Lack of knowledge on utilization of farm ponds for fish production

3. Title of the Technology demonstrated: Composite Fish Culture

4. Thematic area : Utilization of existing water bodies for fish production

5. Year of release of the technology or Year of assessment: 2007

6. Source of technology : UAS, Bangalore

7. Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Fish Species Stocked	Data on the performance indicators of the technology demonstrated			
				% survival	Avg. weight of fish (Kg)	Total yield (Kg.)	Kg/ha
1	Moid Kunhi,	Bellare	Catla (600)	46	0.75	207.00	2070.0
			Common Carp (400)	58.74	0.55	129.25	1292.5
			Total	**51.10**	**-**	**336.25**	**3362.5**
2	Purandara Rai	Balanja	Catla (600)	30.66	0.70	128.80	1288.0
			Common Carp (400)	53.25	0.575	122.48	1224.8
			Total	**39.70**	**-**	**251.28**	**2512.8**
3.	Vasantha	Kajekkar	Catla (600)	31.33	065	122.2	1222.0
			Common Carp (400)	41.75	0.50	83.5	835.0
			Total	**35.50**	**-**	**205.7**	**2057.0**
		Average		**126.3**	**-**	**793.23**	**7932.3**

8. Final recommendation for micro level situation : This technology is well suited to micro level situation

9. Constraints identified and feedback for research : Non availability of fast growing quality carp seeds

10. Process of farmers participation and their reaction : Conducted field day in which farmers participated and expressed their desire to take up the technology