

ACTION PLAN OF KVK, GADAG

FOR THE YEAR 2009-10

Presented at

ACTION PLAN MEETING

(4th-6th May, 2009)

Venue

**Zonal Project Directorate, Zone-VIII
Bangalore**

Prepared by

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ACTION PLAN (2009-10)
OF
K.H. PATIL KRISHI VIGYAN KENDRA, HULKOTI, GADAG DISTRICT

1.	Name and address of KVK with Phone, Fax and e-mail	:	K.H. Patil Krishi Vigyan Kendra Hulkoti – 582205 Dist.: Gadag Phone : (08372) 289069, 289606 Fax : (08372) 289474 E-mail : khpatil_kvkhulkoti@yahoo.com kvkhulkoti@gmail.com
2.	Name and address of host organization with Phone, Fax and e-mail	:	Agricultural Science Foundation Hulkoti – 582205 Dist.: Gadag Phone : (08372) 289069, 289606 Fax : (08372) 289474 E-mail : asf_hulkoti@yahoo.co.in
3.	Name of the Programme Coordinator Residence Phone Number/ Mobile No.	:	Dr. L.G.Hiregoudar Phone (R) : 08372 – 289772 (M) : 9448358772
4.	Year of sanction	:	1985
5.	Year of start of activities	:	1985
6.	Major farming systems/enterprises	:	<i>A) Field crop based Farming systems</i> (i) Chilli + Onion + Cotton, Onion + Chilli (ii) Groundnut – Rabi jowar/wheat (iii) Greengram – Sunflower / Rabi jowar / wheat /Bengalgram (iv) Maize – Bengalgram / wheat (Irrigated) (v) Kharif jowar, Bt cotton <i>B) Horticulture based Farming systems</i> (i) Vegetables (Irrigated condition) (ii) Flower crops (irrigated) (iii) Mango (mainly dryland) <i>C) Major Enterprises</i> (i) Dairy farming (ii) Sheep rearing (iii) Goat rearing
7.	Name of agro-climatic zone	:	<ul style="list-style-type: none"> ▪ Northern Dry Zone (Region – 2) comprising of Gadag, Ron, Naragund and Mundaragi blocks ▪ Semi transitional Zone -8 comprising of Shirhatti block
8.	Soil type	:	Deep black to medium black soils, red sandy soil and red clay soils
9.	Annual rainfall (mm)	:	612 mm

10. Staff Strength as on 01-03-2009:

	Programme Coordinator	Subject Matter Specialists	Programme Assistant	Administrative Staff	Auxiliary Staff	Supporting Staff	Total
Sanctioned	1	6	3	2	2	2	16
Filled	1	6	2	2	2	2	15

11. Details of staff as on 01-03-2009:

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Pay scale	Date of joining	Permanent/Temporary
1.	Programme Coordinator	Dr. L.G.Hiregoudar	Programme Coordinator	16400-22400	05.09.1992	Permanent
2.	Subject Matter Specialist	Mr. S.K.Mudlapur	SMS (Plant Protection)	8000-13500	26.09.1994	Permanent
3.	Subject Matter Specialist	Mr. S.H.Adapur	SMS (Ag. extension)	8000-13500	23.06.1995	Permanent
4.	Subject Matter Specialist	Smt. S.S.Rayanagoudar	SMS (Home Science)	8000-13500	26.06.1995	Permanent
5	Subject Matter Specialist	Mr. V.D.Vaikunthe	SMS (Agronomy)	8000-13500	01.07.1995	Permanent
6	Subject Matter Specialist	Mr. K.T.Patil	SMS (Horticulture)	8000-13500	01.07.1995	Permanent
7	Subject Matter Specialist	Mr. N.H.Bhandi	SMS (Soil Science)	8000-13500	01.06.2005	Permanent
8	Programme Assistant	Dr. B.M.Muragod	Programme Assistant (Animal Husbandry)	5500-9000	25.06.2007	Permanent
9	Computer Programmer	Smt. L.C.Koravanavar	Programme Assistant (Computer Programmer)	5500-9000	01.06.2005	Permanent
10	Farm Manager	Mr. Suresh Halemani	Programme Assistant (Farm manager)	5500-9000	01.02.2009	Temp.
11	Accountant/ Superintendent	Mr. M.B.Jakkanagoudar	Accountant/ Superintendent	5500-9000	25.06.2007	Permanent
12	Stenographer	Mr. Manju D.	Stenographer	4000-6000	11.06.2007	Permanent
13	Driver	Mr. N.L.Hadapad	Driver	3050-4950	03.09.1992	Permanent
14	Driver	Mr. G.D.Madivalar	Driver	3050-4950	20.07.1995	Permanent
15	Supporting staff	Mr. S.B.Kotabagi	Clerk cum Fieldman	2550-3200	18.07.1985	Permanent
16	Supporting staff	Mr. V.R.Navalli	Village Work Attendant	2550-3200	20.07.1993	Permanent

11-A. Disciplinewise details:

Approved list	Name	Existing Designation	Existing Discipline	Needed discipline for the district
Programme Coordinator	Dr. L.G. Hiregoudar	Programme Coordinator	--	--
SMS-1	Mr. S.H. Adapur	SMS (Ag. Extension)	Ag. Extension	Ag. Extension
SMS-2	Smt. S.S. Rayanagoudar	SMS (Home Science)	Home Science	Home Science
SMS-3	Mr. N.H. Bhandi	SMS (Soil Science)	Soil Science	Soil Science
SMS-4	Mr. S.K. Mudlapur	SMS (Plant Protection)	Plant Protection	Plant Protection
SMS-5	Mr. V.D. Vaikunthe	SMS (Agronomy)	Agronomy	Agronomy
SMS-6	Mr. K.T. Patil	SMS (Horticulture)	Horticulture	Horticulture

12. Plan of Human Resource Development of KVK personnel during 2009-10

S. No	Discipline	Area of training required	Institution where training is offered	Approximate duration (days)	Training fee (Rs.)
1	Ag. Extension	Agricultural produce export standards	NAARM, Hyderabad	7	6000.00
2	Horticulture	General green house management	Horticulture training centre, Poona	7	8000.00
3	Home Science	Value addition	CFTRI, Mysore	10	10000.00
4	Agronomy	Integrated farming system	UAS, Dharwad	5	-
5	Soil Science	Nutrient management in oilseed crops	UAS, Dharwad	5	-
6	Plant protection	Organic certification procedures	RCOF, Bangalore	10	-
7	Animal Science	Dairy management	NDRI, Karnal	10	-

13. Infrastructure:

i) Land

Total Area (ha)	Area Cultivated (ha)	Area occupied by buildings and roads (ha)	Area with demonstration units (ha)
20	20	1.5	0.5

ii) Buildings

Admn. Building			Trainees Hostel			Staff Quarters			Demonstration Unit		
Plinth area (m ²)	Cost (Rs. in lakhs)	Year	Plinth area (m ²)	Cost (Rs. in lakhs)	Year	Plinth area (m ²)	Cost (Rs. in lakhs)	Year	No.	Plinth area (m ²)	Cost (Rs. in lakhs)
800	33.46	1996	550	17.26	1997	400	45.00	2006	Dairy, sheep & goat	150	6.63
									Vermicompost	350	5.3
									Nursery	150	3.0

iii) Vehicles

Type of vehicle	Model	Actual cost (Rs. In lakhs)	Total kms. Run	Present status
Bolero SLX Mahindra	2009	6.90	500 Kms	Good
Tractor	2003	5.00	750 hours	Good
Motor cycle	2005	0.40	55822 Kms	Good
Motor cycle	2009	0.50	100 Kms	Good

iv) Equipments and AV aids

Sl. No.	Name of Equipments	Date of purchase	Cost (Rs.in lakhs)	Present status
1	Computer	2003	1.25	Good
2	Camera	1998	0.14	Good
3	Television	1999	0.28	Good
4	Amplifier	1998	0.15	Good
5	Fax	2004	0.25	Good
6	OHP	2004	0.25	Good
7	Hipro lab model gin machine	2006	0.70	Good
8	Seed delinting machine	2006	0.18	Good
9	Cotton seed sorter	2007	0.50	Good
10	Seed treatment drum	2007	0.40	Good
11	Lap top	2007	0.54	Good
12	LCD	2007	0.56	Good
13	Ceramic black board	2007	0.12	Good
14	Rotavator	2008	0.92	Good
15	Rotary weeder	2009	0.90	Good

14. Details of SAC meeting conducted during 2008-09

Sl. No	Date	Major recommendations of SACs which are to be implemented during 2009-10
1	12-08-2008	<ul style="list-style-type: none"> • Successful entrepreneurs to be invited as resource persons for vocational trainings • During organization of field day, one page write up on the success of the technology to be given to participants • Successful OFTs to be tried under front line demonstrations • KVK to organize export potential commodity groups • Market information to be given to farmers • To involve FFS trained farmers in conducting FFS programmes • To organize more training in rain water harvesting
2	24-03-2009	<ul style="list-style-type: none"> • To explore the possibility of facilitating formation of marketing cooperative society with financial assistance from NCDC. • KVK to guide atleast one Gram Panchayat in the preparation of NREGS action plan • To increase area of medicinal and aromatic crops, KVK needs to take demonstrations • To organize ex-trainees meeting • To assess newly released Chick pea variety against wilt disease.

15. Plan of Work for 2009-10

TABLE 1: OPERATIONAL AREA DETAILS FOR 2009-10

Sl. No.	Taluk	Blocks/groups of villages	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
1	Gadag	Kanavi cluster [Comprising of Kanavi, Shirunj, Yelishirunj and Harti] Hosalli cluster [Comprising Hulkoti, Dundur]	Groundnut (Kharif & Summer), Greengram, Sunflower, Onion +Chilli, Chrysanthemum, Brinjal, Tomato, Green Chilli, Dairying and fruit crops like mango and sapota	Groundnut	
				▪ Moisture stress in peg initiation stage in groundnut	▪ <i>In-situ</i> moisture conservation
				▪ Usage of imbalanced dose of nutrients	▪ Integrated Nutrient Management
				▪ Incidence of leaf minor	▪ Leaf minor management
				▪ Low productivity of local variety	▪ Introduction of improved varieties
				Greengram	
				▪ Incidence of Sphingid moth and powdery mildew	▪ Sphingid moth & powdery mildew management
				▪ Non availability of labour for weeding	▪ Promotion of weeder
				▪ Low productivity of local variety	▪ Introduction of S-4 variety
				Onion + Chilli + Cotton	
				▪ Low quality bulb production in onion	▪ Integrated Nutrient Management
				▪ Incidence of purple blotch in onion	▪ Management of purple blotch
				▪ Incidence of mites and thrips in chilli	▪ Management of mites and thrips
				▪ Low quality of dry chilli	▪ Usage of polythene sheets for chilli drying
				Chrysanthemum	
				▪ Bud dropping & improper opening of flower buds	▪ INM
▪ Leaf spot	▪ Leaf spot management				
Brinjal					
▪ Fruit and shoot borer	▪ Fruit and shoot borer				

Sl. No.	Taluk	Blocks/groups of villages	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
					management
				Tomato <ul style="list-style-type: none"> ▪ Incidence of leaf curl 	<ul style="list-style-type: none"> ▪ Leaf curl management
				Live stock enterprises <ul style="list-style-type: none"> ▪ Low milk productivity due to nutritional disorder 	<ul style="list-style-type: none"> ▪ Nutrition management
				Storage pests <ul style="list-style-type: none"> ▪ Incidence of storage pests 	<ul style="list-style-type: none"> ▪ Storage pest management
				Entrepreneurship <ul style="list-style-type: none"> ▪ Lack of entrepreneurship in agriculture ▪ Lack of diversification of crop enterprise 	<ul style="list-style-type: none"> ▪ EDP for rural youths ▪ Promotion of dry land horticulture
2	Mundaragi	Kadampur cluster [Comprising of Shingatarayankeri, Papanashi, Churchihal & Jantli shirur]	Groundnut, Greengram, Hybrid jowar (K), Onion, Chrysanthemum, Hybrid Cotton	Groundnut Bunch Groundnut <ul style="list-style-type: none"> ▪ Cultivation of local variety ▪ Poor shelling percentage ▪ Incidence of leaf minor 	<ul style="list-style-type: none"> ▪ Introduction of TAG-24 variety ▪ INM in groundnut ▪ Leaf minor management
				Greengram <ul style="list-style-type: none"> ▪ Incidence of sphingid moth and powdery mildew 	<ul style="list-style-type: none"> ▪ Sphingid moth & powdery mildew management
				Hybrid jowar (K) <ul style="list-style-type: none"> ▪ Poor quality of fodder ▪ Moisture stress 	<ul style="list-style-type: none"> ▪ Introduction of CSV-15 variety ▪ <i>In-situ</i> soil moisture conservation
				Hybrid cotton <ul style="list-style-type: none"> ▪ Incidence of boll worm & sucking pest 	<ul style="list-style-type: none"> ▪ Introduction of Bt cotton
				Onion <ul style="list-style-type: none"> ▪ Poor quality production of bulbs 	<ul style="list-style-type: none"> ▪ INM in onion
				Chrysanthemum <ul style="list-style-type: none"> ▪ Incidence of bud necrosis ▪ Improper opening 	<ul style="list-style-type: none"> ▪ Bud necrosis management ▪ INM in

Sl. No.	Taluk	Blocks/groups of villages	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
				of buds	Chrysanthemum
				Buffaloe enterprise	
				▪ Infertility in buffaloes	▪ Nutrient Management
				Storage pests	
				▪ Incidence of storage pest	▪ Grain storage
				Entrepreneurship	
				▪ Lack of entrepreneurship in agriculture	▪ EDP for rural youths
3	Shirahatti	Magadi cluster [Comprising of Magadi, Parasapur, Yettinahalli, Madolli]	Spreading groundnut, Hybrid jowar (K) + Tur, Onion+Chilli+Cotton	Spreading Groundnut	
				▪ Use of impure seeds	▪ Supply of pure seeds
				▪ Non usage of balanced nutrition	▪ Integrated Nutrient Management
				▪ Unsustainable production	▪ Promotion of inter cropping system
				▪ Moisture stress	▪ <i>In-situ</i> soil moisture conservation
				Onion	
				▪ Low productivity of local variety	▪ Introduction of Arka Niketan variety
				Buffaloe enterprise	
				▪ Low milk yield due to poor quality fodder and nutritional disorders	▪ Enrichment of dry fodder
				Grain storage	
				▪ Incidence of storage pests	▪ Storage pest management
				Entrepreneurship	
				▪ Lack of entrepreneurship in agriculture	▪ EDP for rural youths
4	Ron	Sandigwad cluster [Comprising of Sandigawad, Mallapur and Chikkamannur villages]	Onion + Chilli + Cotton, Cotton, Greengram, Groundnut, Rabi jowar and sunflower	Onion + Chilli + Cotton	
				▪ Moisture stress	▪ In-situ soil moisture conservation
				▪ Cultivation of local variety in onion	▪ Assessment of improved variety in onion
				Greengram	
				▪ Non availability of labours during harvesting	▪ Assessment of mechanised harvesting in China Moong &

Sl. No.	Taluk	Blocks/groups of villages	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
					S4 variety in greengram
				<ul style="list-style-type: none"> Drudgery in hoeing & weeding operations 	<ul style="list-style-type: none"> Introduction of drudgery reducing equipments
				Cotton	
				<ul style="list-style-type: none"> Unsustainable production 	<ul style="list-style-type: none"> ICM in rabi cotton
				Rabi jowar	
				<ul style="list-style-type: none"> Moisture stress 	<ul style="list-style-type: none"> <i>In-situ</i> soil moisture conservation Drought tolerance inducing technology
				Sheep enterprises	
				<ul style="list-style-type: none"> Low productivity due to worm infestation 	<ul style="list-style-type: none"> Deworming camps
				Nutrition	
				<ul style="list-style-type: none"> Nutrition deficiency in human beings 	<ul style="list-style-type: none"> Introduction of nutritional garden
				Fuel saving enterprises	
				<ul style="list-style-type: none"> Drudgery in cooking 	<ul style="list-style-type: none"> Introduction of Envirofit Chulha for fuel efficiency
5	Naragund	Hadli cluster [Comprising of Hadli, Gangapur, Khanapur and Naganur villages]	Maize, Bengalgram, Wheat, Sunflower and Hybrid Cotton	Maize	
				<ul style="list-style-type: none"> Incidence of stem borer & downy mildew 	<ul style="list-style-type: none"> Management of stem borer and downy mildew
				<ul style="list-style-type: none"> Low fertility of soil 	<ul style="list-style-type: none"> Green manuring
				Bengalgram	
				<ul style="list-style-type: none"> Lack of integrated crop management practices 	<ul style="list-style-type: none"> ICM in bengalgram
				Wheat	
				<ul style="list-style-type: none"> Drudgery in harvesting 	<ul style="list-style-type: none"> Introduction of improved sickle
				Hybrid cotton	
				<ul style="list-style-type: none"> Incidence of pests and low yield 	<ul style="list-style-type: none"> Introduction of Bt cotton along with ICM
				Dairy enterprises	
				<ul style="list-style-type: none"> Infertility in CB cows 	<ul style="list-style-type: none"> Nutritional management
				<ul style="list-style-type: none"> Ticks and mites infection 	<ul style="list-style-type: none"> Management of ticks and mites

SUMMARY OF LIST OF THRUST AREAS FOR THE KVK FOR 2009-10

- i) *In-situ* soil moisture conservation
- ii) INM in oilseeds, pulses, cereals and onion
- iii) ICM in bengalgram, groundnut and cotton
- iv) Sustainable crop production technologies
- v) Soil fertility management
- vi) Seed production in onion
- vii) Feed management in milch animals
- viii) Ecto and Endo parasite management in live stock
- ix) Self employment opportunities for youths
- x) Women drudgery reduction measures
- xi) Entrepreneurship development in agriculture

Table-2: Abstract of interventions proposed based on the prioritized problems during 2009-10

Sl. No.	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	Others
1	Greengram	Low productivity due to cultivation of local variety	--	Introduction of Selection-4 variety	Cultivation of Selection-4 variety along with ICM	ICM in Greengram	Field day
		Pod borer, Powdery mildew & leaf spot	--	ICM in greengram	ICM in greengram	ICM in greengram	--
		Non availability of labours during harvesting		Mechanized harvesting in selection - 4 variety	Mechanised harvesting in Greengram	Mechanised harvesting in Greengram	Exposure visits and demonstration
	Farm implements Twin wheel hoe weeder	Drudgery in weeding and hoeing operation	--	Demonstration of twin wheel hoe weeder	Drudgery reducing equipments	--	Exhibition of implements during field day
2	Bengalgram	Low productivity	--	ICM in Bengalgram	ICM in Bengalgram	--	Field day
		Incidence of wilt	<ul style="list-style-type: none"> Refinement of Trichoderma dosage for effective control of wilt disease 	--	Management of wilt in Bengalgram	Management of wilt in Bengalgram	--

Sl. No.	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	Others
3	Kharif groundnut (Spreading type)	Poor shelling percentage	--	Integrated nutrient management	Management of nutrients for enhancing shelling percentage & oil content in groundnut	ICM in spreading groundnut	Field day
		Low productivity of local variety	-		--	--	
		Incidence of leaf minor	-	Management of leaf minor	Timely management of leaf minor	-	-
		Incidence of root grub	Assessment of seed treatment with Chloripyriphos for root grub management		Management of root grub	-	-
		Moisture stress	--	Compartment bunding	In situ moisture conservation practices in dry land area	-	--
4	Summer groundnut	Cultivation of local variety	--	Demonstration of TAG-24 variety	ICM in TAG-24 variety	--	Field day
		Poor shelling percentage	--	INM in groundnut	--	--	--
		Incidence of leaf minor and tikka disease	--	Management of leaf minor and tikka disease	Integrated pest and disease management	-	-

Sl. No.	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	Title of OFT if any
5	Sunflower (rabi/summer)	Imbalanced nutrition	--	INM in sunflower	INM in sunflower for higher productivity	INM in sunflower	Field day
		Incidence of powdery mildew, downy mildew & SND	--	Management of powdery mildew, downy mildew & SND	ICM in sunflower	ICM in sunflower	Radio talk
6	Hybrid cotton	Incidence of sucking pest & pod borers	--	Introduction of Bt- Cotton along with ICM	ICM in Bt-Cotton	ICM in Bt-cotton	<ul style="list-style-type: none"> ▪ Field day ▪ Publication of leaflet
7	Rabi Cotton	Low productivity due to cultivation of Jayadhar cotton variety	--	Introduction of DDHC-11, an improved rabi cotton variety along with ICM	ICM in Rabi cotton	--	Field day
8	Maize	Usage of nutrients	--	--	INM in maize for higher productivity	--	Field day
		Incidence of downy mildew & stem borer	--	--	Seed treatment & foliar application of Ridomnil M.Z & spray of profenophos for higher productivity	--	--
		Low fertility of soil in Command Area	--	--	Soil fertility management for higher production in Malaprabha Command Area	Soil fertility management in maize under Malaprabha Command Area	--

Sl. No.	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	Others
9	Wheat	Application of imbalanced nutrients	--	INM in wheat	INM in wheat	INM in wheat	Field day
10	Kharif jowar + Redgram	Poor quality of fodder	--	Demonstration of DSV-6 variety	ICM in Kharif jowar	--	Field day
		Moisture stress	--	Demonstration of compartment bunding	Insitu soil moisture conservation practices	--	--
		Cultivation of long duration variety in Red gram	--	Demonstration of medium duration ICPL-87 Red gram variety	ICM in Red gram	--	--
11	Rabi jowar	Moisture stress	--	<ul style="list-style-type: none"> ▪ Compartment bunding ▪ Seed priming with CaCl₂ 	Moisture stress management in rabi jowar for higher productivity	--	Field day
		Drudgery in harvesting of stalks	--	Demonstration of serrated sickle for cutting of Jowar Stalks	Drudgery reduction measuring in Jowar	--	Method demonstration

Sl. No.	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	Others
12	Onion	Poor quality bulb production in local variety	Assessment of Agrifound Light Red variety		ICM in onion	--	Field day
		Low productivity of local variety	--	Introduction of high yielding Arka Niketan variety	ICM in onion & Keerthiman	ICM in onion	Field day
		Non-availability of high yielding variety seeds	--	--	Onion seed production technology	--	Seed production activities
		Incidence of thrips	Management of thrips				
13	Chilli	Low yield due to imbalanced nutrients	--	--	INM in chilli	--	Field day
		Murda complex	Management of Murda Complex	--	Murda complex management	--	Field day
		Poor quality of dry chilli	--	--	Post harvest technology in chilli	--	Facilitating supply of polythene sheets from Spices Board
14	Tomato	Leaf curl	--	Demonstration of leaf curl tolerant Arka Ananya hybrid	Leaf curl management	--	Field day
		Fruit borer	--	--	Fruit borer management through IPM		Field day

Sl. No.	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	Others
15	Brinjal	Fruit & shoot borer	Management of fruit and shoot borer	--	IPM in brinjal	--	--
16	Chrysanthemum	Improper opening & dropping of buds	--	--	INM in chrysanthemum	--	Field day
		Leaf spot incidence	--	--	Management of leaf spot	--	Field day
17	Dairy enterprise	Low milk production & low milk fat	Feeding of probiotic animal feed supplement		<ul style="list-style-type: none"> ▪ Nutritional management in CB cows 	--	--
18	Dairy enterprise	Infestation of ecto & endo parasites	--	Management of ecto and endo parasites	Ecto and Endo parasites management	--	--
19	Fuel saving devices	Less availability of fuel and drudgery in cooking	Assessment of envirofit chulha for efficiency and drudgery reduction	--	Drudgery reducing and fuel saving devices	--	--
20	Nutrition	Nutrition deficiency	--	--	Balanced diet, nutrients, deficiency diseases	--	--
21	Groundnut stripper	Drudgery in stripping groundnut pods from crop vines	Assessment of groundnut stripper		Usage of farm implements in groundnut	--	Method demonstration
22	Value addition	Lack of value addition	--	--	Promotion and value addition in pulses & vegetables	--	--
23	--	Lack of entrepreneurship in agriculture	--	--	EDP for rural youths	--	Exposure visits

TABLE 2A. Target set for number of interventions to be implemented during 2009-10

S. No	Particulars of intervention	Target number / Quantity
01	On Farm Trial	11
02	Front Line Demonstration (other than oil seeds, pulses and cotton)	297
	Front Line Demonstration (Oilseeds)	110 no.
	Front Line Demonstration (Pulses)	100 no.
03	Training Programmes	
	Farmers and farm women	2500
	Rural Youth	200
	Extension personnel	200
	Sponsored programmes	1500
04	Extension Programmes	
	Field Day	6
	Kisan Mela	2
	Kisan Ghosthi	3
	Exhibition	3
	Film Show	8
	Method Demonstrations	
	Farmers Seminar on Azolla cultivation	2
	Workshop	
	Group meetings	10
	Lectures delivered	4
	Newspaper coverage	5
	Radio coverage	2
	TV coverage	5
	Radio Programmes	7
	TV Programmes	7
	Publications	2
	Popular articles	5
	Extension Literature	3
	Advisory Services	50
	Scientific visit to farmers' fields	200
	Farmers visit to KVK	20
	Diagnostic visits	
	Field visits	100
	Exposure visits	5
	Ex-trainees Sammelan	3
	Agriculture Camps	
	Clinic day	
	Soil health Camp	5
	Animal Health Camp	3
	Agri mobile clinic	
	Soil test campaigns	10
	Farm Science Club Conveners meet	
	Self Help Group Conveners meetings	10
	Mahila Mandals Conveners meetings	
	Celebration of Nutrition week	
	PRA exercise conducted	5
	Survey on socio economic improvement through Animal Science to SHG women	
	Awareness on Cotton contract farming	
	Distribution of BT cotton seeds under contract farming in collaboration with Cotton Corporation of India	
	Insect trap awareness campaign	
	AIDS awareness campaign	
	Awareness on KVK activities to Tribes	
	Formation of Joint Liability Groups	15
05	Production and supply of seed materials	
	1) Cereals	5
	ii) Oilseeds	10
	iii) Pulses	10

S. No	Particulars of intervention	Target number / Quantity
	iv) Vegetables	10
	v) Flower crops	
	vi) Others (Specify)	
	Production and supply of Planting materials	
	Fruits	5000
	Spices	
	Vegetables	
	Forest species	2000
	Ornamental crops	2000
	Plantation crops	1000
	Others	
	Production and supply of bio-products	
	Bio agents	50000
	Bio fertilizers	
	Bio pesticides	
	Production and supply of livestock material	
	Sheep	
	Goat	
	Fisheries	
	Others (Specify)	
06	Number of soil samples to be analyzed	1800
07	Number of water samples to be analyzed	150

TABLE-3. PLAN FOR ON FARM TESTINGS (2009-10)

ASSESSMENT NO. 1

1. Title of the On Farm Trial : Assessment of seed treatment with chlorpyrifos for management of root grub in Groundnut
2. Agro-Ecological Zone : Northern dry zone-3, Region – 2
3. Production System : Small production system under rainfed situation
4. Problem identified : Incidence of root grub in Groundnut
5. No. of farmers and area affected
In the operational villages : 175 farmers in an area of 158 ha
6. Thrust area : Root grub management in Groundnut
7. Rationale for proposing the OFT : The present recommendation for the management of root grub is soil application with phorate or carbofuran or spraying with chlorpyrifos. It is observed that the cost of inputs is more and it is not environment friendly practice, Hence seed treatment with chlorpyrifos @ 6.25ml/kg. of seed will manages the root grub menace in Groundnut crop.
8. Technology option-1 : i) No soil treatment
ii) Extent of yield loss is 30-40% depending upon severity of the incidence
9. Technology option-2 : i) Soil application of phorate or carbofuron 25 kg/ha
ii) Technology Source : UAS, Dharwad
iii) Extent of adoption : 10-15%

10. Technology option-3 : Seed treatment with chlorpyriphos 6.25 gm/kg seed.

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	Phorate	20kg	50.00	1000.00	Chlorpyriphos	250ml	500.00	125.00

12. Area (ha.) : 6.0 ha

- i.) Technology option – 1 (Farmer’s Practice) : 2 ha
- ii.) Technology option – 2 (Recommended Practice) : 2 ha
- iii.) Technology option – 3 : 2 ha

13. Grand total cost proposed per OFT : Rs. 1125/-

14. Total number of OFTs proposed : 10

15. Total budget required : Rs. 11250/-

ASSESSMENT NO. 2

1. Title of the On Farm Trial : Assessment of Groundnut stripper to reduce drudgery of farmwomen in stripping Groundnut pods from the plant.
2. Agro-Ecological Zone : Northern dry zone
3. Production System : Groundnut production system
4. Problem identified : In the identified villages, Groundnut is the major crop. The stripping of Groundnut pods from crop vines is done with hands which is laborious, time consuming and causes more drudgery to farmwomen. Therefore, Groundnut stripper will be assessed for stripping of Groundnut pods from crop vines.
5. No. of farmers and area affected
In the operational villages : About 200 farmers and area about 300 Ha.
6. Thrust area : Drudgery reduction
7. Rationale for proposing the OFT : The stripping of Groundnut pods from crop vines is done by farmwomen with hands which is labour intensive and also the drudgery is involved. To make the process easier and to compare the economics and the output, the Groundnut stripper will be assessed in comparison with stripping by hands.
8. Technology option-1 : Stripping of Groundnut with hands.
9. Technology option-2 : The Groundnut stripper developed by TNAU, Coimbatore will be used.
10. Technology option-3 : --

11. Budget proposed for each OFT (0.4 ha) (Per OFT)

Sl. No.	Critical inputs for technological option-2 Recommended Practices				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.					Groundnut stripper	1	4000.00	4000.00

12. Area (ha.) for implementing : 1 Ha

13. Grand total cost proposed for OFT : Rs.4000/-

14. Total number of OFTs proposed : 05

15. Total budget required : Rs. 12000/-

ASSESSMENT NO. 3

1. Title of the On Farm Trial : Assessment of Cloth gloves for harvesting of bengalgram and sunflower
2. Agro-Ecological Zone : Northern dry zone-3, Region – 2
3. Production System : --
4. Problem identified : Injury to palms due to pricking
5. No. of farmers and area affected In the operational villages : 80% of farm women
6. Thrust area : Drudgery reduction and health management
7. Rationale for proposing the OFT : To reduce the injury caused to the palms while harvesting
8. Technology option-1 (Farmer's practice and extent of yield loss) : With bare hand and causes injury to palm
9. Technology option-2 : No recommendation
10. Technology option-3 :

Refinement planned	Source	Justification
Cloth gloves	Farm women wrap old cloth to the palm	Cloth gloves prevents the injury caused to the palms

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2 (Recommended practice)				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1	By hand	-	-	-	Cloth gloves	1 pair	100/-	100/-

12. Area (ha.) :

- i.) Technology option – 1 (Farmer’s Practice) : No cost
- ii.) Technology option – 2 (Recommended Practice) : 10 Nos
- iii.) Technology option – 3 : 100

13. Grand total cost proposed per OFT : Rs. 100/-

14. Total number of OFTs proposed : 20

15. Total budget required : Rs. 2000/-

ASSESSMENT NO. 4

1. Title of the On Farm Trial : Murda disease management in Chilli
2. Agro-Ecological Zone : Northern dry zone – 3 Region – 2
3. Production System : Medium and big farmer production system under rainfed situation
4. Problem identified : Incidence of Murda disease in Chilli
5. No. of farmers and area affected
In the operational villages : 580 Farmers in an area of 490 ha.
6. Thrust area : Murda disease management in Chilli
7. Rationale for proposing the OFT : Application of Neem cake helps to manage the thrips and mite incidence. It has got a repellent and ovicidal effect. Mixed cropping with coriander has repelling effect on the insect. Sorghum as border crop checks the thrips and mite population. Foliar spray of Garlic and Chilli extract reduces the spread of the incidence.
8. Technology option-1 : i) Spraying with monocrotophos @ 1.5ml/lit
ii) Extent of yield loss 40-50%
9. Technology option-2 : i) Spraying of Dimethoate 1.7ml/lit of water 20 –25 days after sowing
ii) Spraying of Dimethoate 1.7ml/lit of water 35 –40 days after sowing
iii) Spraying of Dicofol 2.5ml/lit of water 60 –70 days after sowing
iv) Extent of adoption 20-30%
v) Source of Technology : UAS, Dharwad

10. Technology option-3

- : i) Soil application of neemcake @ 250 kg/ha + FYM @ 5 Qt/ha
- li) Coriander as mixed crop @ 1 kg/ha
- iii) Sorghum as border crop (six rows on all four sides of the crop)
- iv) Spraying of Garlic + Green Chilli extract 0.5% with Nimbicidine @ 25 ml/ lit
- v) Source of technology – UAS, Dharwad and PDBC, Bangalore

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2				Critical inputs for other technology options-3			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	Dimethoate	400 ml	355/lit	142/-	Neem Cake	1 Qt	650/Qtl.	650/-
2.	Dicofol	400 ml	430/lit	172/-	Coriander	200 gm	50/Kg	10/-
					Garlic	0.5 kg	50/-	25/-
					Green Chilli	2 kg	25/Kg	50/-

12. Area (ha.) : 6 ha

- i.) Technology option - 1: : 2 ha
- ii.) Technology option – 2 : 2 ha
- iii.) Technology option – 3 : 2 ha

13. Grand total cost proposed per OFT : Rs. 1049/-

14. Total number of OFT : 10

15. Total budget required : Rs. 10490/-

ASSESSMENT NO.5

1. Title of the On Farm Trial : Assessment of Agrifound Light Red variety of onion for better keeping quality
2. Agro-Ecological Zone : Northern dry zone-3, Region – 2
3. Production System : Big farmers production system under dry land condition.
4. Problem identified : In identified villages farmers are using local variety (Bellary red) since longtime and this variety has low keeping quality. Hence, this variety is fetching less price in the market and farmers loose in prices.
5. No. of farmers and area affected
In the operational villages : More than 2000 farmers in an area of 1500 ha.
6. Thrust area : Assessment of new Onion variety
7. Rationale for proposing the OFT : Agrifound Light Red variety produces good keeping quality bulbs and it is high yielder.
8. Technology option-1 : Cultivation of Bellary red variety.
9. Technology option-2 : Bellary red, N-53 and Telagi Red
10. Technology option-3 : Assessment of Agrifound Light Red variety

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2 Recommended Practices				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	Seed	1 Kg.	300/-	300/-	Seed	1 Kg	400/-	400/-

12. Area (ha.) for implementing

- i.) Technology option – 1 (Farmer’s Practice) : 2 Ha
- ii.) Technology option – 2 (Recommended Practice) : 2 Ha
- iii.) Technology option – 3 : 2 Ha

13. Grand total cost proposed for OFT : Rs.700/-

14. Total number of OFTs proposed : 20

15. Total budget required : Rs. 14000/-

ASSESSMENT NO. 6

1. Title of the On Farm Trial : Assessment of sulphur nutrition in Onion crop
2. Agro-Ecological Zone : Northern dry zone-3, Region – 2
3. Production System : Rainfed
4. Problem identified : Low yield, poor keeping quality of the Onion bulb
5. No. of farmers and area affected
In the operational villages : 750 farmers in an area of 940 ha
6. Thrust area : Management of sulphur in Onion crop
7. Rationale for proposing the OFT : Sulphur containing Amino acids like cystine, methionine and also pyruvic acid
which will enhance the bulb size, keeping quality and yield
8. Technology option-1 : Application of 65:35:37 N.P. & K. Kg/ha
9. Technology option-2 : Application of 125:50:125 N.P. & K. Kg/ha
10. Technology option-3 : Application of 125:50:125 N.P. & K. Kg/ha + Sulphur 45 Kg/ha

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2 (Recommended practice)				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
-	-	-	-	-	Gypsum	140 Kg.	3/Kg.	420/-

12. Area (ha.) :

- i.) Technology option – 1 (Farmer’s Practice) : 2 ha
- ii.) Technology option – 2 (Recommended Practice) : 2 ha
- iii.) Technology option – 3 : 2 ha

13. Grand total cost proposed per OFT : Rs. 420/-

14. Total number of OFTs proposed : 20

15. Total budget required : Rs. 8400/-

ASSESSMENT NO. 7

1. Title of the On Farm Trial : Assessment for management of thrips in Onion
2. Agro-Ecological Zone : Northern dry zone-3, Region – 2
3. Production System : Big farmers production system under dry land condition
4. Problem identified : In identified villages, Onion crop is severely affected by thrips incidence leading to decreased productivity.
5. No. of farmers and area affected
In the operational villages : More than 1000 farmers in an area of 800 ha
6. Thrust area : Management of thrips in Onion crop
7. Rationale for proposing the OFT : Planting of two rows of Maize as barrier crop in Onion reduces this thrips infestation up to 80%
8. Technology option-1 : Farmers practice – Spray of dimethoate @ 1.75ml/lit – 2 sprays
9. Technology option-2 : Spraying of Dimethoate @ 1.75 ml/lit – 2 sprays
10. Technology option-3 : Maize as a border crop (two rows) and spray of Lamda Cyhalothrin @ 0.5ml/lit - 2 sprays
Source of Technology : National Research Centre for Onion & Garlic

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1	Dimethoate	1 lit.	350.00	350.00	Maize Seeds	1 Kg	40	40.00
					Lamda Cyhalothrin	400 ml	680/Lit	332.00

12. Area (ha.) for implementing

- i.) Technology option – 1 (Farmer’s Practice) : 2 ha
- ii.) Technology option – 2 (Recommended Practice) : 2 ha
- iii.) Technology option – 3 : 2 ha

13. Grand total cost proposed per OFT : Rs.722/-

14. Total number of replications proposed : 20

15. Total budget required : Rs. 14440/-

ASSESSMENT NO. 8

1. Title of the On Farm Trial : Purple blotch management in Onion
2. Agro-Ecological Zone : Northern dry zone-3, Region – 2
3. Production System : Rainfed
4. Problem identified : Incidence of purple blotch in Onion
5. No. of farmers and area affected
In the operational villages : 750 farmers in an area of 940 ha
6. Thrust area : Management of purple blotch in Onion crop
7. Rationale for proposing the OFT : Spray of Difenconazole for management of purple blotch is effective during cloudy days and humid condition
8. Technology option-1 : Spray of mancozeb @ 25 gm/ltr
Extent of yield loss: 25 to 30 % depending upon severity of incidence
9. Technology option-2 : Spray of mancozeb or manol @ 29 gm/lt
Technology Source: UAS, Dharwad
10. Technology option-3 : Seed treatment with Trichoderma @ 25gm/ha and spray of Difenconazole @ 500 ml/ha
Technology Source : UAS, Dharwad

11. Budget proposed for OFT (0.4 ha)

Sl. No.	Critical inputs for technological option-2 (Recommended practice)				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	Mancozeb	250 ml	125.00	125.00	Trichoderma	10 gm	6.00	06.00
					Difenconazole	200 ml	230.00	460.00
	Total			125.00				466.00

12. Area (ha.) :

i.) Technology option – 1 (Farmer's Practice) : 2 ha

ii.) Technology option – 2 (Recommended Practice) : 3 ha

iii.) Technology option – 3 : 3 ha

13. Grand total cost proposed per OFT : Rs. 591/-

14. Total number of OFTs proposed : 20

15. Total budget required : Rs. 11820/-

ASSESSMENT NO. 9

1. Title of the On Farm Trial : Management of shoot and fruit borer in Brinjal
2. Agro-Ecological Zone : Northern dry zone
3. Production System : Small production system under irrigated condition
4. Problem identified : Shoot and fruit borer in brinjal
5. No. of farmers and area affected
In the operational villages : 216 Farmer and 110 ha.
6. Thrust area : Shoot and Fruit borer Management in brinjal
7. Rationale for proposing the OFT : Carbosulfan @ 2 ml/lit helps in getting higher yield as it is a contact insecticide and having fumigant action
8. Technology option-1 : Foliar spray of Manocrotophos @ 1.5 ml/lit of water. 2-3 sprays are taken
In farmers' practice, extent of yield loss is 20-30%.
9. Technology option-2 : Soil application of neem cake @ 250kg/ha at transplanting
and foilar application of Carbaryl @ 4 gm/lit of water
Technology source : UAS Dharwad
Extent of adoption : 15-20%
10. Technology option-3 : Spray of Carbosulfan @ 2ml/lit

11. Budget proposed for OFT (0.2 ha.)

Sl. No.	Critical inputs for technological option-2				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	Neem Cake	50 Kg	650/Qtl	325/-	--	--	--	--
2.	Carbaryl	300 gm	375/Kg	113/-	Carbosulfan	400 ml	730/lt	292/-

12. Area (ha.) : 3.0 ha

- i.) Technology option – 1 : 1 ha
- ii.) Technology option – 2 : 1 ha
- iii.) Technology option – 3 : 1 ha

13. Grand total cost proposed per OFT : Rs. 730/-

14. Total number of OFTs : 10

15. Total budget required : Rs. 7300/-

ASSESSMENT NO. 10

1. Title of the On Farm Trial : Feeding of mineral mixture with pro-biotic animal feed supplement for high milk production
2. Agro-Ecological Zone : --
3. Production System : --
4. Problem identified : Reduced milk production due to less intake of feed
5. No. of farmers and area affected In the operational villages : 250 farmers in the 5 adopted villages.
6. Thrust area : Nutrition Management
7. Rationale for proposing the OFT : As per the body weight of the animal, the consumption of feed is less due to less number of beneficial bacteria in the rumen.
(Biobloom-Yeast-Culture)
 - i) Stabilizes the ruminal pH
 - ii) Alters ruminal Fermentation pattern.
 - iii) Increases the concentration of Volatile Fatty Acids (VFA) in the rumen.
 - iv) Stimulates the beneficial bacteria in rumen
 - v) Biobloom contains *Saccharomyces cerevisiae* and other beneficial micro organisms
8. Technology option-1 : Feeding only concentrated feed without mineral mixture.
9. Technology option-2 : The recommended practice by UAS, Dharwad i.e., use of mineral mixture along with concentrated feed.

10. Technology option-3

: Feeding of mineral mixture with pro-biotic feed supplement (Source : Research carried out by IVRI, Izatnagar)

11. Budget proposed for OFT (per animal)

Sl. No.	Critical inputs for technological option-2 Recommended Practices				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	UAS mineral mixture	2 Kg.	60	120.00	Mineral mixture along with pro-biotic feed supplement	1 Kg	300.00	300.00

12. Area (ha.) for implementing

- i.) Technology option – 1 (Farmer's Practice) : 6
- ii.) Technology option – 2 (Recommended Practice) : 6
- iii.) Technology option – 3 : 6

13. Grand total cost proposed for each OFT : Rs. 420/-

14. Total number of OFTs proposed : 20

15. Total budget required : Rs. 8400/-

ASSESSMENT NO.11

1. Title of the On Farm Trial : Assessment of envirofit chulha for fuel efficiency and drudgery reduction.
2. Agro-Ecological Zone : -
3. Production System : -
4. Problem identified : In the identified villages, more than 70% of farmwomen face shortage of firewood and drudgery involved in collecting it. The inhalation of smoke during cooking causes health problems. To overcome this problem, an OFT has been proposed for comparative analysis of envirofit chulha and traditional chulha.
5. No. of farmers and area affected
In the operational villages : Majority of the farm families in the district.
6. Thrust area : Drudgery reduction
7. Rationale for proposing the OFT : To reduce the drudgery, health hazards and to make the cooking environment clean, the Envirofit India has introduced envirofit chulha to suit to rural households. In this chulha, the fuel efficiency is more, heat will be there for longer period and smoke is less.
8. Technology option-1 : Cooking in Traditional Chulha
9. Technology option-2 : Nil

10. Technology option-3

: “Envirofit Chulha” technology was developed by Colorado State University Engines and Energy Conversion Laboratory (EECL) by U.S. and popularizing in India by Envirofit Private Company Limited, Bangalore. The locally available firewood or agriculture wastes are used in this Chulha for cooking. This Chulha is cost effective and fuel efficient. It produces less smoke and provides clean cooking environment.

11. Budget proposed for OFT (each OFT)

Sl. No.	Critical inputs for technological option-2 Recommended Practices				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	-	-	-	-	Envirofit Chulha	1	1800	1800
2.	-	-	-	-	-	-	-	-

12. Area (ha.) for implementing

- i.) Technology option – 1 (Farmer’s Practice) : -
- ii.) Technology option – 2 (Recommended Practice) : -
- iii.) Technology option – 3 : 3 Households of SHG members

13. Grand total cost proposed for OFT : Rs.1800/-

14. Total number of OFTs proposed : 03

15. Total budget required : Rs. 5400/-

OFT – REFINEMENTS

REFINEMENT NO. 1

Refinement No.1

1. Title of the On Farm Trial : Refinement of Trichoderma dosage for effective control of wilt disease in Bengalgram
2. Agro-Ecological Zone : Northern dry zone-3, Region-2
3. Production System : Big farmers production system under Irrigated situation
4. Problem identified : Incidence of wilt disease in Bengalgram
5. No. of farmers and area affected In the operational villages : 350 farmers in an area of 225 ha
6. Thrust area : Wilt disease management in Bengal gram
7. Rationale for proposing the OFT : The present recommendation for the management of wilt is seed treatment with Trichoderma @ 4 gm/kg seed. It is observed that this dosage is not adequate to manage the wilt disease, hence dosage of 10 gm of Trichoderma is proposed as a refinement for the management of wilt disease.
8. Technology option-1 : Seed treatment with captan @ 2.5gm/kg
Extent of yield loss 20-30%
Extent of adoption 5-10%
9. Technology option-2 : Seed treatment with Trichoderma @ 4 gm/kg seed
Source of Technology : UAS, Dharwad
Extent of adoption : 10-15%

10. Technology option-3 : Seed treatment with Trichoderma @ 10gm/kg seed
 Source of Technology : PDBC, Bangalore & DOR, Hyderabad
 Increased dosage of Trichoderma will have prolonged effect because of colonization of Trichoderma spores in the rhizosphere which in turn check the multiplication of spores of wilt causing fungi.

11. Budget proposed for OFT

Sl. No.	Critical inputs for technological option-2				Critical inputs for other technology options			
	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1.	Trichoderma	100gm	200/Kg	20.00	Trichoderma	250gm	200/Kg	50/-

12. Area (ha.) :

- i.) Technology option – 1 (Farmer’s Practice) : 2 ha
- ii.) Technology option – 2 (Recommended Practice) : 2 ha
- iii.) Technology option – 3 : 2 ha

13. Grand total cost proposed per OFT : Rs. 70/-

14. Total number of replications proposed : 50

15. Total budget required : Rs. 3500/-

Table 4. Season-wise plan of Front Line Demonstrations (FLD) for 2009-10

A. Other than oil seeds pulses and cotton

KHARIF SEASON

Thrust area	Crop / livestock / enterprises	Yield gap (q/ unit ha / number) or (number/unit)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha) / Number	No. of farmers	
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha) or number/unit	Cost (Rs./ha) or Rs./unit			
<ul style="list-style-type: none"> In situ soil moisture conservation Introduction of DSV-6 Kharif jowar variety Introduction of ICPL-87 red gram variety 	Kharif jowar + Red gram (5:1)	4.0	15-16	10-12	<ul style="list-style-type: none"> Moisture stress Low productivity of local variety Low productivity of local Red gram variety 	<ul style="list-style-type: none"> Compartment bunding Demonstration on DSV-6 variety Demonstration of ICPL – 87 variety 	<ul style="list-style-type: none"> Seeds DSV-6:8kg/ha ICPL-87:8kg/ha 	240 400	15	30	
Total							640				
• Introduction of high yielding variety	Onion	100	280	120	Low productivity of local variety	Introduction of Arka Niketan variety for higher productivity	Seed 2.5 kg/ha	400	15	15	
• Drudgery	Twin wheel hoe weeder	-	-	-	-	Twin wheel hoe weeder	20 weeders	Rs.750/weeder	5 No.	25	
• Ecto & Endo parasite management in pregnant animals	Dairy cow	5.2 lit/ animal/ day	15 lit/ animal/ day	7 lit/ animal/ day	• Not following deworming schedule in pregnant animals	• Management of ecto & endo parasite through ivermectin injection	Injection of ivermectin, 1 ml/50 kg Body wt [7 ml/animal]	Rs. 109/ vail of 7 ml	34 No.	34	
Total							109				

Thrust area	Crop / livestock / enterprises	Yield gap (q/ unit ha / number) or (number/unit)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha) / Number	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha) or number/unit	Cost (Rs./ha) or Rs./unit		
Introduction of hybrid	Onion	100	220	120	Low productivity of local variety under irrigation	Introduction of Arka Keerthiman hybrid	Seed 10 Kg	3500	2	6
Introduction of high yielding variety	French bean	-	-	-	Low productivity of local variety	• Introduction of high yielding variety Arka Suvidha	• Seeds 75kg/ha	2250	4 Ha	20
Introduction of high yielding variety	Ridge gourd	-	-	-	Low productivity of local variety	• Introduction of high yielding varieties Arka Sujata & Arka Sumit	• Seeds 5 kg/ha	1300	8 Ha	20
Soil fertility management	Maize	53	58	48	Accumulation of sodium in soil	• Incorporation of Sunhemp as green manuring crop @ 50 Kg Sunhemp seeds/ha	• Sunhemp seeds – 50 Kg	1500	10 Ha	25
ICM in maize	Maize	53	58	48	Low productivity	• ICM in maize	• ZnSO ₄ – 10 Kg • Mancozeb – 2 Kg • Monocrotophos – 0.5 lit • Jaggary – 5 Kg • Ricebran – 50 Kg	500 725 250 125 300	4	10
						Total		1900		

RABI SEASON

Thrust area	Crop / livestock / enterprises	Yield gap (Q/ ha / number) or (number/unit)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha) / Number	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha) or number/unit	Cost (Rs./ha) or Rs./unit		
• Insitu soil moisture conservation	Rabi jowar	8	14-15	9-10	• Moisture stress	• Seed priming with Cacl ₂ (2%)	Seeds • M-35-1 - 8 Kg • Calcium chloride - 250 gm	240 25	30	25
Introduction of high yielding variety	Rabi jowar	8	14-15	9-10	• Lack of high yielding variety for black soil	• Demonstration of CSV-22 variety	8 Kg	240	20	50
Introduction of new variety	Wheat	10.5	50	22	• Low productivity of existing variety	• Introduction of DWR-225 variety	Seeds – 150 Kg	2700	5	12
Aster Flower crop Introduction during Chrysanthemum off season	Aster	NA	90	-	During off season of chrysanthemum Aster can be grown as alternative to Chrysanthemum	Introduction of high yielding Aster variety Phule Ganesh	750 gm/ha	1000	6	20
Introduction of high yielding variety under rainfed condition	Tomato	100	300	190	Low productivity of local variety	Introduction of high yielding variety Arka Meghali	Seeds 250 gm/ha	500	10	25
Drudgery reduction	Rabi jowar	-	-	-	Drudgery in harvesting of jowar stalks	Demonstration of serrated sickle developed by Dev Agro, Bangalore	Serrated sickle	150	8	20

Thrust area	Crop / livestock / enterprises	Yield gap (Q/ ha / number) or (number/unit)			Reasons for yield gap Name & Quantity (kg/ha) or number/unit	Technology to be demonstrated Cost (Rs./ha) or Rs./unit	Critical inputs to be provided		Area (ha) / Number	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha) or number/unit	Cost (Rs./ha) or Rs./unit		
Fruit fly management in mango	Mango	350	750	420	Incidence of fruit fly & mango hopper	<ul style="list-style-type: none"> • Hanging of methyl eugenol traps with lures and Malathion 0.1% • Spraying with Neem Seed Kernel extract 5% at bud burst stage • Spraying of Imidacloprid @ 0.5 ml/lit of water 	<ul style="list-style-type: none"> • Methyl eugenol traps with lures @ 10/ha • Malathion @ 20 ml/ha • Neem seed Kernel @ 50 Kg/ha • Imidacloprid @ 100 ml/ha 	<p>1330</p> <p>7</p> <p>325</p> <p>228</p>	5 Ha	12

SUMMER SEASON

Thrust area	Crop / livestock / enterprises	Yield gap (q/ unit ha / number) or (number/unit)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha) / Number	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha) or number/unit	Cost (Rs./ha) or Rs./unit		
Leaf curl Management	Tomato	100	350	190	Heavy leaf curl infestation during summer season	Demonstration of leaf curl resistant variety Arka Anannya	Seeds 100 gm/ha	2500	5 Ha	12
Nutrition through Azolla feeding	C.B.Cows	5 L/day	15 L/day	7 L/day	<ul style="list-style-type: none"> • Feeding of dry fodder and imbalanced nutrition • High cost of concentrated feed 	Feeding of Azolla@2kg/day per animal	<ul style="list-style-type: none"> i) Azolla culture, 1Kg/farmer ii) Polythene sheet (6'x4') 	<ul style="list-style-type: none"> Rs.100 per kg Rs. 350 	20 Units	20
Drudgery	Improved sickle	-	-	-	-	Improved sickle in harvesting of wheat	20 sickles	Rs. 150/sickle	2 ha.	20
Leaf spot management	Chrysanthemum	35	80	46	Incidence of leaf spot disease	<ul style="list-style-type: none"> • Soil application of Trichoderma @ 2.5 Kg/ha with FYM @ 5 Qt/ha • Foliar spray of Chlorothalonil @ 2 ml/lit of water 	<ul style="list-style-type: none"> • Trichoderma @ 2.5 Kg/ha • Chlorothalonil @ 750 gm/ha 	<ul style="list-style-type: none"> 500 712.5 	6 Ha	20

**B. Oil seeds
KHARIF SEASON**

Thrust area	Crop	Yield gap (q/ ha)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha)	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha)	Cost (Rs./ha)		
<ul style="list-style-type: none"> In situ soil moisture conservation Integrated nutrient management 	Groundnut (spreading type)	5.70	15-16	12-13	<ul style="list-style-type: none"> Moisture stress 	<ul style="list-style-type: none"> Compartment bunding 				
<ul style="list-style-type: none"> Leaf minor management 					<ul style="list-style-type: none"> Imbalanced nutrition 	<ul style="list-style-type: none"> Application of micro nutrient 	Znso4 – 25 Kg/ha Feso4 – 25 Kg/ha Gypsum – 5 Qt./ha	1000 750 1500	20 Ha	30
<ul style="list-style-type: none"> Root grub management 					<ul style="list-style-type: none"> Incidence of leaf minor 	<ul style="list-style-type: none"> Seed treatment with Trichochoerma 	Trichoderma – 500 gm/ha	100		
					<ul style="list-style-type: none"> Incidence of root grub 	<ul style="list-style-type: none"> Rhizobium & PSB Pest & disease management 	Rhizobium –1 Kg/ha PSB – 1 Kg/ha Monocrotophos – 1 lit/ha Phorate – 10 Kg/ha	40 40 320 500		

SUMMER SEASON

Thrust area	Crop	Yield gap (q/ ha)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha)	No. of farmers District average yield
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha)	Cost (Rs./ha) or Rs./unit		
New variety and ICM	Sunflower	8.50	18-20	14-15	•Imbalanced nutrition	•Demonstration of KBSH-53 •Nutrient management	Seeds – 5 Kg ZnSo ₄ – 10 Kg/ha Gypsum – 1 Qt/ha Boron – 1 Kg/ha	1250 400 300 200	15	25
					•Incidence of powdery mildew	P.M. management	Propiconazole – 0.5 lit/ha	498		
					•Incidence of sunflower necrosis disease	SND management	Imidacloprid – 200 ml/ha	456		
Introduction of TAG-24 variety	Groundnut	10.00	20-22	15-16	•Low productivity of local variety	•Demonstration of TAG-24 variety	•Pods TAG-24 2.25 Qt/ha	3500	10	15
Integrated nutrient management					•Imbalanced nutrient management	•Application of micro nutrients and bio-fertilisers	ZnSo ₄ – 25 Kg/ha FeSo ₄ – 25 Kg/ha Gypsum – 5 Qt/ha Rhizobium – 2 Kg/ha PSB – 2 KG/ha	1000 750 1500 80 80		

C. Pulses

KHARIF SEASON

Thrust area	Crop	Yield gap (q/ ha)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha)	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha)	Cost (Rs./ha) or Rs./unit		
ICM	Greengram	1.75	8-10	4-5	<ul style="list-style-type: none"> • Cultivation of local variety • Moisture stress • Incidence of pod borer • Incidence of powdery mildew and leaf spot 	<p>ICM in greengram</p> <ul style="list-style-type: none"> • Demonstration of Selection-4 variety • Usage of bio-fertiliser and vermicompost • Spraying of Propiconazole @ 1 ml/lit 	<ul style="list-style-type: none"> • Seed (Selection-4) @ 12.5 Kg/ha • Trichoderma @ 125 gm/ha • Rhizobium @ 500 gm/ha • Vermicompost @ 5 Qtl/ha • Propiconazole @ 250 gm/ha 	<ul style="list-style-type: none"> 625 25 20 1250 256 	50	125

RABI SEASON

Thrust area	Crop	Yield gap (q/ ha)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha)	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha)	Cost (Rs./ha) or Rs./unit		
ICM	Bengalgram	10	20-22	14-15	Incidence of pod borer and wilt disease	ICM in Bengalgram <ul style="list-style-type: none"> • Seed treatment with Trichoderma • Seed treatment with Rhizobium • Soil application of vermicompost • Installation of Phermone traps with lures • Spraying of Profenophos • Spraying of Acephate • Bird perches • Jowar as border crop 	<ul style="list-style-type: none"> • Pure seeds – 62 Kg • Trichoderma @ 625 gm/ha • Rhizobium @ 1 Kg/ha • Vermicompost @ 5 Qtl./ha • Pheromone traps @ 8 No./ha • Lures @ 24 No./ha 	<ul style="list-style-type: none"> 1860 120 40 1250 144 192 	50	120

D. Cotton

KHARIF SEASON

Thrust area	Crop	Yield gap (q/ ha)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha)	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha)	Cost (Rs./ha) or Rs./unit		
Introduction of Bt-cotton & ICM	Bt-cotton	11.5	25	17	<ul style="list-style-type: none"> • Incidence of sucking pest • Leaf reddening • Lack of awareness on Bt Cotton cultivation 	ICM in Bt cotton	Seeds (Bt-cotton)	1650	10	25
							RCH – 2 :1.25 Kg/ha			
							Imidacloprid – 500 ml/ha (2 times)			
							MgSo ₄ – 1.250 Kg/ha			
							NAA – 20 ml/ha	80		

RABI SEASON

Thrust area	Crop	Yield gap (q/ ha)			Reasons for yield gap	Technology to be demonstrated	Critical inputs to be provided		Area (ha)	No. of farmers
		District average yield	Potential yield	Farmers yield			Name & Quantity (kg/ha)	Cost (Rs./ha) or Rs./unit		
ICM in desi cotton (Rabi Season)	Cotton	2.0	10	4.5	• Moisture stress	Compartment bunding	-	-	20	50
					• Low productivity of local variety	Demonstration of DDHC-11 variety	Seeds DDHC-11:10 Kg/ha	500		
							Azospirillum : 12.5 Kg/ha	500		
							PSB : 12.5 Kg/ha	500		
• Square dropping	Spray of NAA	NAA : 0.5 lit/ha Methenol	175							
• Leaf reddening	Management of leaf reddening	MgSo ₄ – 2 Kg/ha	200							

TABLE 5 : PLAN For Training Programmes For Extension Functionaries During 2009-10

Crop / Enterprise	Identified Thrust Area	Organization	Training Course Title	No. of Courses	Skill to be transferred
Greengram	To increase productivity	Extension personnel of Karnataka State Department of Agriculture	ICM in greengram (S4 variety)	1	-
	Mechanized harvesting		Mechanised harvesting in greengram	1	-
Bengalgram	To manage wilt		Management of wilt through seed treatment with trichoderma @ 10 g/Kg	1	-
Groundnut	To improve shelling percentage		INM in groundnut	1	-
Sunflower	To manage powdery mildew		Powdery mildew management through spraying of difenconazole	1	-
Hybrid cotton	Enhancement of productivity		ICM in Bt cotton	1	-
Maize	Low soil fertility in command area		Soil fertility management in command area	1	-
Onion	Low production		ICM in onion	1	-

Table 6: Plan of vocational training programmes for Young Farmers (Rural Youth) during 2009-10

Crop / Enterprise	Identified Thrust Area	Training title*	No. of programmes	Duration (days)	Skill to be transferred
Entrepreneurship	Lack of entrepreneurship skills in agriculture	Entrepreneurship development in agriculture	5	10	Skills in production, processing & marketing
Value addition	Lack of value addition in pulses & vegetables	Promotion & value addition in pulses & vegetables	3	2	Preparation of value added products
Dairy	Self employment	Dairy management	4	5	Dairy management skills

Table 7: Plan of training programmes for farmers/farm women during 2009-10

Crop / Enterprise	Major problem	Identified Thrust Area	Training Course Title	No. of Courses	Skills to be transferred
Greengram	Low productivity of local variety	Introduction of high yielding variety	ICM in S4 variety	2	Identification of morphological characters of two varieties
	Incidence of pod borer & powdery mildew	Management pod borer & powdery mildew	Management of pod borer & powdery mildew	2	Identification of pest
	Non availability of labours for weeding	Introduction of mechanized weeding	Mechanised harvesting in greengram	1	--
Bengalgram	Low productivity due to pod borer	IPM	ICM in bengalgram	2	Identification of pest, IPM package
	Incidence of wilt	Management of wilt	Management of wilt	3	Identification of disease, chemicals for control measure, treatment method
Kharif groundnut (SP)	Poor shelling percentage	To increase shelling percentage	INM in groundnut	3	Identification and application of nutrients
	Low yield of local variety	Introduction of new variety	ICM in JSP39 variety	2	Identification of varietal characters
	Incidence of leaf minor	To manage leaf minor	Management of leaf minor	2	Identification of pest and chemicals for management
	Moisture stress	Moisture conservation	Insitu soil moisture conservation	3	Preparation of compartment bunds
	Drudgery in weeding & hoeing	To reduce drudgery	Drudgery reduction equipment	4	Operation of twin wheel hoe weeder
Summer groundnut	Low yield of local variety	Introduction of new variety for higher yield	ICM in TAG-24 variety	2	Identification of characters in TAG-24
	Poor shelling percentage	To improve shelling percentage	INM in groundnut	3	Identification of symptoms of deficiency and usage of nutrients

Crop / Enterprise	Major problem	Identified Thrust Area	Training Course Title	No. of Courses	Skills to be transferred
	Leaf minor	To manage leaf minor	Leaf minor management	2	Identification of pest, chemicals, dosage & method of spray
Sunflower	Imbalanced nutrition	Balanced nutrition	INM in sunflower	3	Symptoms of nutrition deficiencies and quantity & methods of application of nutrients
	Powdery mildew	To manage powdery mildew	Management of powdery mildew	2	Identification of disease and chemical dosage
Hybrid cotton	Low productivity	Introduction of Bt. Cotton	ICM in Bt cotton variety	2	Identification of Bt. Cotton characteristics
Desi cotton	Low productivity	Introduction of DDHC-11 variety	ICM in DDHC-11 variety	2	Identification of varietal characteristics
Maize	Imbalanced nutrition	Balanced nutrition	INM in maize	2	Deficiency symptoms & nutrient for application
	Downy mildew & stem borer	To manage pest & disease	Management of stem borer & downy mildew	5	Identification of pest & disease, symptoms & chemicals, dosage
	Low soil fertility	To improve soil fertility	Soil fertility management in command area	2	-
Kharif jowar + Redgram	Poor quality fodder in jowar	Introduce DSV-6 variety	ICM in Kharif jowar	2	-
	Moisture stress	Moisture conservation	<i>In-situ</i> soil moisture conservation	2	Methods of moisture conservation
	Long duration variety in redgram	To introduce short duration varieties	ICPL-87 variety and ICM in red gram	2	Characters of ICPL-87 variety
Rabi jowar	Moisture stress	Moisture conservation & seed priming	Moisture stress management	3	Methods of moisture conservation & seed treatment with CaCl ₂
Onion	Poor quality bulb	Arka nicketan variety	ICM in onion	3	Characters of Arka nicketan variety
Chilli	Imbalanced nutrition	Balanced nutrition	INM in chilli	2	Nutrition deficiency & identification of nutrition,

Crop / Enterprise	Major problem	Identified Thrust Area	Training Course Title	No. of Courses	Skills to be transferred
					dosage & time of application
	Murda complex	Management of murda complex	Management of murda complex	2	Identification of symptoms
	Poor quality dry chilli	Post harvest technology	PHT in chilli	2	--
Tomato	Leaf curl	To manage leaf curl	Leaf curl management	1	Identification of disease, symptoms & chemicals, dosage & methods of spray
	Fruit borer	To manage fruit borer	Fruit borer management	1	Identification of pest & chemicals for control
Brinjal	Fruit & shoot borer	To manage fruit and shoot borer	IPM in brinjal	1	Identification of pest, symptoms & IPM components
Dairy enterprise	Imbalanced nutrition in CB cows	To increase milk production	Nutritional management in CB cows	4	Preparation of low cost feed & enrichment of dry fodder and cultivation of Azolla
	Worm infestation	To manage worms	Ecto & endo parasite management	2	Identification of ecto & endo parasites
Fuel saving devices	Non availability of fuel & drudgery	Fuel efficiency & reduce drudgery	Drudgery reducing & fuel saving devices	3	Operation of Envirofit chulha
Human nutrition	Nutrition deficiency	To establish kitchen garden	Balanced diet, nutrition & deficiency diseases	3	Deficiency symptoms, layout of kitchen garden
Farm implements	Drudgery in harvesting	To introduce improved sickle	Drudgery reducing equipments	2	Operation of sickle

Table 8 : Plan for sponsored training programme during 2009-10

Crop/ Enterprise	Identified Thrust Area	Organization	Training course title	No. of Courses	Sponsored Agency	Skill to be transferred
Oilseed crops	To enhance productivity	KSDA	ICM in oilseeds	3	KSDA	Relevant skills will be taught based on the requirement of trainees
Pulse crops	To enhance productivity	KSDA	ICM in pulses	3	KSDA	
Soil management	To enhance soil fertility status	KSDA	Soil fertility management	3	KSDA	
Organic farming	Promotion of organic farming practices	KSDA	Organic farming practices	3	KSDA	
Fruit crops	Promotion of fruit crops	Department of Horticulture	Fruit crop cultivation practices	5	Department of Horticulture	
Dairy enterprise	To enhance milk production	SGSY KSDA	Management of milch animals	8	SGSY KSDA	
Agro enterprise	Value addition	KSDA	Value addition and agriculture produce	3	KSDA	
Soil, water & crop management	Water management	CADA	Soil & water management in command area	5	CADA	
In-situ soil moisture conservation	Watershed Development	Watershed Development Department	Soil and Water Conservation	20	Watershed Development Department	

Table 9: Details of Extension programmes planned for 2009-10

Month	Block & village	Extension activity	Its relation to KVK activities (Tables 2 to 6)**	Expected category of participants	Remarks
1	2	3	4	5	6
April	Gadag, Hosur cluster, Hosalli cluster, Mundaragi, Kadampur cluster, Shirahatti, Magadi cluster	Kharif campaign	Training and demonstration	500	
May	-do-	-do-	-do-	300	
August	Shirahatti, Magadi	Field day/ Demonstration on mechanized harvesting in greengram	FLD	100	
September	Shirahatti, Parasapur, Naragund	Field day in spreading groundnut	FLD	100	
	Hadli	Field day in maize	FLD	150	
October	Gadag, Hosur cluster, Mundaragi, Kadampur cluster, Shirahatti, Magadi cluster	Rabi campaign, Demonstration on groundnut stripper	Training and demonstration	500	
November	Mundaragi, Kadampur,	Demonstration on Envirofit	FLD	300	
	Gadag, Hosur	Field day on onion			
	Ron, Sandigawad	Demonstration on twin wheel hoe weeder			
December	Naragund, Hadli, Mundaragi, Kadampur	Field day in Sunflower, Field day in Bt cotton, Women in agricultural day	FLD	300	
January	Naragund, Hadli, Ron, Sandigawad	Animal health camp, Field day in Bengal gram	FLD	250	
February	Ron, Hadli, Shirahatti, Madolli	Field Day in desi Cotton	FLD	300	
March	Gadag, Hosur, Ron, Sandigawad	Field day in summer groundnut	FLD	150	

Table 10: Details of print & electronic media coverage planned for 2009-10

Sl. No.	Nature of literature/publications and no. of copies	Proposed title of the publication
1	Leaf let – 2000	Integrated Nutrient Management in Groundnut
2	Leaf let – 2000	Production technology of Bt cotton
3	Leaf let – 2000	Balanced nutrition in milch animals
4	Leaf let – 2000	Production technology in onion
Sl. No.	Nature of media coverage	Proposed title of the programme to be telecasted/ broadcast
1	Radio talk	Insitu soil moisture conservation practices
2	Radio talk	Dry land agronomic practices
3	Radio talk	Organic farming & certification
4	Radio talk	Quality bulb production in onion
5	Radio talk	Self employment opportunities for Rural Youths
5	Television	Fruit and shoot borer management in brinjal
6	Television	Seed priming in rabi jowar
7	Television	Drudgery reduction measures in farm operation

Table 11: Nature of collaborative activities planned for 2009-10

Thrust area	Collaborative Organizations	Nature of activities*	No. of Activities
Soil and water conservation	District Watershed Development Department	Training	20
Production technology of Kharif and rabi crops	Karnataka State Department of Agriculture	Training & workshops	17
Crop diversification	Deshpande Foundation, USA	Training & demonstration in dryland horticulture	100 ha.
Transfer of technology	Karnataka State Department of Agriculture	Implementation of field school	2
Self employment	Zilla panchayat (SGSY programme)	Training	10
Organic farming in chilli	Spices Board, Hubli	Training	2

Table 12: Financial status of revolving fund and plan for its utilization

Opening balance as on 01.04.2008	Expenditure incurred during 2008-09	Receipts during 2008-09	Closing balance as on 31.03.2009	Proposed expenditure during 2009-10	Proposed receipts during 2009-10
7.24	3.690	8.918	12.468	6.50	10.00

Table 13: Physical status of revolving fund and plan for its utilization

Opening stock position of materials* as on 01.04.2008		Quantity produced during 2008-09 (Qtls)	Quantity sold during 2008-09 (Qtls)	Closing stock position as on 31.03.2009	Expected production during 2009-10	Expected number of beneficiaries
Material	Qty. (Qtls)					
Onion seeds	-	4.56	4.56	-	15.0	200
Cotton						
DDHC-11	-	56.99	56.99	-	50.00	350
Jayadar	-	35.33	35.33	-	40.00	200
Mango seedlings	-	1260	1260	-	8000	50
Sapota	-	750	750	-	1000	25
Coconut seedlings	-	500	500	-	1000	60
Earthworm	-	0.5	0.5	-	1.0	30

Table 14 : Plan for utilization of Revolving Fund (2009-10)

Amount to be invested (Rs.)	Purpose	Expected production	Approximate value of the produce (Rs.)
Seed production			
30,000/-	Onion seed production	5.0	1,50,000/-
Seedling production			
80,000/-	Mango seedling production	8000 (no.)	2,40,000/-
15,000/-	Twin wheel hoe weeder	20 (no.)	18,000/-
1,500/-	Improved sickle	25 (no.)	2500/-

Table 15: Status of KVK farm and Demonstration units

No. of blocks	Area	Source of irrigation	Season	Crop/enterprise/demonstration units	Size (no. of units/area)	Expected output	
						Quantity	Value
14	20 ha.	Borewell as protective irrigation for about 4 ha land.	Kharif	Greengram, Groundnut	2.0	18	45000.00
				Onion + chilli + cotton	3.0	40+7+3	90000.00
				Onion	2.0	36	54000.00
				Cotton	2.0	10	30000.00
			Rabi	Jowar	2.0	15	10500.00
				Bengalgram	2.0	25	62500.00
				Onion seed production	1.0	5	150000.00
			Perennial	Mango	0.8	1.5 ton	15000.00
				Dairy unit	5 no.	15000 liters	135000.00
				Sheep unit	12 no.	10 lambs	18000.00
				Goat	15 no.	20 kids	34000.00
				Vermicompost	350 sqm	400 qtls.	80000.00
				Earthworm	-	2 Qtls	50000.00
Total						834000.00	

16 . Are there any activities planned for production and supply (Either buy back or directly farmer to farmer) of seeds/ planting material/Bio-agents etc. In villages (other than KVK farm) so that public private partnership is utilized. Please give details in the following format

Sl. No	Seeds/Planting material /Bio-agent	Name of the public-private partnership arranged	Quantity of output expected (Qtl)
1.	Onion seed production	KVK identified JLG/SHG members	10
2	Groundnut	JLG/KVK identified JLG/SHG members	30
3	Greengram	JLG/KVK identified JLG/SHG members	25
4	Earthworm	JLG/KVK identified JLG/SHG members	1

17. What is the extent of cultivable wasteland in your district? Are there any specific activities planned to be implemented in these wastelands by the KVK during 2009-10. Please give details.

As area under cultivable waste land is very less and hence no activities are proposed.

18. National Horticulture Mission (NHM) is being implemented through out the country. You are requested to plan for implementing some of the activities envisaged in NHM in your district in collaboration with district head of department of horticulture. Please give details of any such plans for 2009-10

Area expansion component of National Horticultural Mission is not covered in Gadag district. However training component is covered and KVK has planned to organize training programme under this component.

19. Whether ATMA is functioning in your district? YES/NO : YES

If yes, what type of coordination and collaboration does your KVK is proposed to have during 2009-10?

Gadag district is covered under ATMA activities during 2008-09. Under ATMA, it is proposed to organize field schools in major crops of the district.

If Yes, whether Strategic Research and Extension Planning (SREP) has been prepared?

Yes / No : Yes

Strategic Research and Extension plan has been prepared.

20. What type of Scientist-Farmer linkages are proposed by your KVK for 2009-10?

KVK has proposed to organize farmers' field school in the district under ATMA proramme. The farmers' field schools are the best forums for scientist – farmer linkage as the field school runs for the whole season.

21. Activities of soil, water and plant testing laboratory

Year of establishment	Expenditure is Rs.(lakhs)	No. of soil samples planned To be analyzed and reported	No. of water samples planned To be analyzed and reported	No. of Plant Samples planned To be analyzed and reported	Remarks if any
2005	11.8	500	50	50	

ACTIVITIES PROPOSED UNDER FARMERS FIELD SCHOOL (FFS)

Title of FFS: Integrated Crop Management in Bt Cotton

Problem Definition: In Gadag district area under Bt Cotton is picking up and it contributes to the district economy to considerable extent. The farmers are unaware of Bt Cotton production aspects. Incidence of sucking pest and mired bug problems are affecting the net income of farmers. Farmers have been using mixture of 2-3 pesticides to control the pest menace, which resulted in increasing the cost of production apart from destroying the beneficial natural predators, parasitoides and 'Fungus'. This calls for an approach to involve the farmers in management of pest through eco-friendly means i.e., Integrated Crop Management through Farmers' Field School concept.

MAIN OBJECTIVES OF FARMERS' FIELD SCHOOL

- I) To provide basic agro-ecological knowledge and skills on Bt Cotton production throughout the crop season through participatory means.
- II) To reduce the cost of cultivation incurred mainly on pesticides
- III) To enhance Farmers' participatory decisions on the management of pest.
- IV) To increase the net income of farmers
- V) To conserve the natural predators, parasitoids and Fungus.

SCIENTIFIC RATIONALE OF FARMERS' FIELD SCHOOL

The FFS approach helps to understand the problem and its causes through participatory approach. It helps to study the agro-ecological system of the production and adopt environment friendly measures to tackle the problem.

THE LEARNING PROCESS INVOLVED IN FARMERS' FIELD SCHOOL

Integrated Crop Management training through FFS approach is unique in many ways. It holds farmers interest till end of the programme. The training which stretches throughout the Bt Cotton season addresses the production technology and more importance to pest menace and its control through eco-friendly methods. Life cycle and nature of damage of each pest is studied by the farmers. They understand the beneficial and non-beneficial insects. Farmers can be able to study the agro-ecological analysis of their production system and learn the role of community in addressing the pest menace.

ACTORS IN FARMERS' FIELD SCHOOL

Participants of Farmers' Field School: These are the leading farmers selected by villagers

Collaborator: Is farmer/farmwomen who gives land for conducting field studies in throughout the cropping season.

Facilitator: Facilitator is a technically competent person to lead the group of leading farmers through exercises. The facilitator will participate in discussion sessions as contributor rather than a leader in arriving at an agreed consensus.

Priorities of Farmers' Field School:

- Agro-eco-system analysis of Bt Cotton production system
- Management of pest through eco-friendly means
- Reduction of cost of production
- Community role in addressing the problem

Budget details:

Sl. No.	Particulars	Amount (Rs.)
1.	Critical input for conducting ICM in Bt Cotton	4000.00
2.	Refreshment during Ten Training Programme @ 600/programme	6000.00
3.	Farmers' Field School Kits	2500.00
4.	Bags & Caps	2000.00
5.	Field day expenditure	3000.00
6.	Publishing material expenditure	1500.00
7.	Honorariums for 2 facilitators for 10 visits @ 400/visit	4000.00
8.	Stationary & other expenditure	2000.00
	Total	25000.00

22. Details of budget utilization (2008-09)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	a) Pay & Allowances	4000000.00	3999746.00	3993828.00
	b) Pay & Allowances (Arrears)	2439000.00	2438841.00	2444780.00
2	Traveling allowances	100000.00	99985.00	99859.00
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	220000.00	219576.00	219848.00
B	POL, repair of vehicles, tractor and equipments	120000.00	119934.00	119930.00
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	90000.00	89720.00	89860.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	80000.00	79860.00	79822.00
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	75000.00	74809.00	74731.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	30000.00	29894.00	29902.00
G	Training of extension functionaries	20000.00	20000.00	20000.00
H	Maintenance of buildings	30000.00	29412.00	30000.00
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		7204000.00	7201777.00	7202555.00
B. Non-Recurring Contingencies				
1	Works	-	-	-
2	Equipments including SWTL & Furniture (Fax Machine)	15000.00	15000.00	15000.00
3	Vehicle (Four wheeler)	600000.00	600000.00	600000.00
4	Library (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		615000.00	615000.00	615000.00
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		7819000.00	7816777.00	7817555.00

23. Details of Budget Estimate (2009-10)

S. No.	Particulars	Amount (Rs. in lakhs)
A. Recurring Contingencies		
1	Pay & Allowances	47.335
2	Traveling allowances	2.000
3	Contingencies	
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.500
B	POL, repair of vehicles, tractor and equipments	1.500
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	1.000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.800
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.500
G	Training of extension functionaries	0.300
H	Maintenance of buildings	0.500
I	Establishment of Soil, Plant & Water Testing Laboratory	--
J	Library	0.300
TOTAL (A)		57.735
B. Non-Recurring Contingencies		
1	Works	32.00
2	Equipments including SWTL & Furniture	5.80
3	Vehicle (Four wheeler/Two wheeler, please specify)	--
4	Library (Purchase of assets like books & journals)	0.25
TOTAL (B)		38.05
C. REVOLVING FUND		--
GRAND TOTAL (A+B+C)		95.785

24. Targets for E-linkage activities

S. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
01	Final installation of E-Linkage facility	June 2009	-
02	Creation of web-site	Website is already created	-
03	Development of Technological Models with modules in major disciplines	January – 2010	Technology module on Bengalgram crop
04	Creation and maintenance of relevant database system for KVK	Feb - 2010	1. OFT 2. FLD 3. Training database 4. Seeds & planting material 5. Extension activities 6. Database of farmers visit to our KVK 7. District database 8. Database of SHGs 9. Database of soil test 10. Database of survey made for need based trainings
05	Any other (Please specify)		-

25. Activities planned under Rainwater Harvesting Scheme during 2009-10 (only to those KVKs which are already having scheme under Rain Water Harvesting)

S. No	Activities planned during 2009-10	Remarks if any
1	Training of farmers on various rain water harvesting structures	No. of courses : 10 No. of farmers : 300
2	Establishment of rain water harvesting structures in farmers field under KVK guidance	No. of farmers : 30

26. Please give details of activities planned, other than those listed above : Nil