ZONAL PROJECT DIRECTORATE – ZONE VIII BANGALORE

PROFORMA FOR ACTION PLAN OF KVKS IN ZONE VIII FOR THE YEAR 2011-12

I. General information about the Krishi Vigyan Kendra

1.	Name and address of KVK with Phone, Fax and e-mail	:	Krishi Vigyan Kendra Banavasi Road, Sirsi-581 401 District : Uttara Kannada State : Karnataka **Phone Office (08384) : 228411** **Fax Office (08384) : 228411** kvkuks@gmail.com
2.	Name and address of host organization with Phone, Fax and e-mail	:	University of Agricultural Sciences, Krishi Nagar Dharwad -580 005 **Phone Office (0836): 2448512, 2447494** **Fax Office (0836) : 2748199**
3.	Name of the Programme Coordinator Residence Phone Number/ Mobile No.	:	Dr. Hemant G. Hegde **(08384) : 247958** 9448495345
4.	Year of sanction	:	**10th October, 2000 (NATP). 2004 (Full fledge) KVK**
5.	Year of start of activities	:	2000
6.	Major farming systems/enterprises	:	**Farming systems** : Paddy (Rainfed)-Pulses Arecanut-Pepper-Cadomom-Cocoa Pine apple, Cashew, Ginger Banana, Mango
7.	Name of agro-climatic zone	:	Zone IX and X
8.	Soil type	:	Red sandy loam and laterites
9.	Annual rainfall (mm)	:	1000 mm – 4000 mm

IIStaff Strength as on 01-02-2011:

	Programme Coordinator	Subject Matter Specialists	Programme Assistant	Administrative Staff	Auxiliary Staff	Supporting Staff	Total
Sanctioned	1	6	3	2	2	2	16
Filled	1	4	2	2	1	1	12
Vacant	0	2	1	0	1	1	05

III. Details of staff as on 01-02-2011

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Existing Pay scale	Number in which directly associated in the proposed programmes				Date of joining	Permanent / Temporary
					No. of technologies to be assessed / refined	FLDs	Training Programmes	Extension Programmes		
1.	Programme Coordinator	Dr. Hemant G. Hegde	Horticulture	37400-67000 (AGP-10000)	03	02	24	8	22.08.2006	P
2.	Subject Matter Specialist	Mr. Ganapathi. T.	Horticulture	37400-67000 (AGP – 9000)	02	02	30	10	15.06.2005	P
3.	Subject Matter Specialist	Dr (Mrs) Roopa S. Patil	Agricultural Entomology	15600-39100 (AGP – 6000)	01	04	20	10	3.12.2008	P
4.	Subject Matter Specialist	Smt. Vinutha U. Muktamath	Home Science	15600-39100 (AGP – 6000)	01	04	25	10	15.07.2009	P
5	Subject Matter Specialist	Dr. Rajakumar G. R.	Soil Science	15600-39100 (AGP – 6000)	03	04	22	10	21.07.2009	P
6	Subject Matter Specialist	Vacant	Agronomy	-	-	-	-	-	-	-
7	Subject Matter Specialist	Vacant	Vet. Science		-	-	-	-	-	-
8	Programme Assistant	Vacant	Agro-Forestry	-	NOT APPLICABLE				-	-
9	Computer Programmer	Mrs. Annapurna F. Neeralgi	Computer Science	5500-175-9000 (ICAR Pre revised)					29.03.2010	P
10	Farm Manager	Dr. Praveen T. Goroji	Soil science	5675-175-9000 (ICAR Pre revised)					13.11.2008	P
11	Accountant/Superintendent	Mr. N. K. Nayak	Accounts	11400-21600/-					02.01.2006	P
12	Stenographer	Miss Purnima K. Hirehal	Typist	8000-14800					12.11.2009	P
13	Driver 1	Mr.Balappa Taragar	Driver (LV)	5800-10500					6-10-2009	P
14	Driver 2	Vacant	-	5800-10500					-	-
15	Supporting staff 1	Mr. H.A. Nadaf	Cook cum Caretaker	5200-8200/-					02.08.2007	P
16	Supporting staff 2								-	T

IV.. Plan of Human Resource Development of KVK personnel during 2011-12

S. No	Discipline	Area of training required	Institution where training is offered	Organization	Justification	Highlight on Future programmes to be planned after training	Approximate duration (days)	Training fee (Rs.)
	Horticulture	Value addition to horticultural crop produces	IIHR, Bengalur	-	To acquaint with the new methodologies /technologies	Vocational training to rural youth and farmers	7	-
	Horticulture	Protected cultivation	IIHR, Bengalur	-	To acquire the knowledge of protected cultivation of horticultural crops	Training to progressive e farmers of the district	21	-
	Horticulture	Recent advances and micro propagation of horticultural crops	IIHR, Bengalur	-	To enrich with the knowledge of micro propagation of horticultural crop species	Vocational programmes to rural youth	21	-
	Soil Science	Geoinformatics In Land Resource Management	NBSS&LUP, Nagpur	ICAR	Essential to build the knowledge on remote sensing which will help in planning farmer friendly projects	Project planning and search of further needs of knowledge build up	21 days (9-29th March, 2011)	Sponsored by ICAR
	Home-Science	Fruit and vegetable processing and packaging	IIHR,Bangalore Or CFTRI	-	Uttarakannada is rich in biodiversity so it is necessary to learn new and scientific technologies	To conduct farm women SHG on processing and take up IG activity	10	
	Home-Science	Mushroom	IIHR	-	To learn oyster and milky mushroom cultivation	To conduct trainings to farm women	4	4150
	Home-Science	Bakery training	Bakery unit	UAS , Dharwad	To learn Preparation of bakery products	To conduct trainings to farm women	5	
	Plant protection	Biological control	Hands on training on production of microbial pesticides	DOR, Hyderabad	In Uttar kannada district farmers are very much inclined towards organic means of pest control. It helps in further strengthening in production of microbial pesticides.	Vocational training on mass production of entomopathogeic fungi to rural youths.	8	5000/- + service tax
	Plant protection	IPM	Integrated rice crop management	DRR, Hyderabad	In uttar kannada district rice is a major field crop. To combat insect pests integrated management is need of the hour	Advance techniques in management of rice pests	5	-
	Computer Science	Advanced techniques in web designing(server side- PHP)	NIIT Bangalore	-	To acquaint with the new technologies of webdesigning with web based databases	Dynamic websites to connect to the farmers through web	20	-
		RDBMS(Oracle) and connectivity to websites	NIIT Bangalore	-			15	-

V.. Infrastructure

i) Land

Total Area (ha)	Area Cultivated (ha)	Area occupied by buildings and roads (ha)	Area with demonstration units (ha)
2.11	2.0	0.11	-

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)
-	-	-	395.81	30.0	2003	-	-	-	-	-	-

iii) Vehicles

Type of vehicle	Model	Actual cost (Rs.)	Total kms. Run	Present status
Motor bike KA 31 J 3307	Yamaha Crux 2002	42,850.00	24949	Good
Motor bike KA 25 EC 7562 KA 25 EC 7564	Hero Honda - Passion 2009 2009	42,450.00 42,450.00	5800 4713	Good Good
Toyota Qualis Jeep KA 31M 2652	2004	5,00,000.00	1,05,115	Good

iv) Equipments and AV aids

Sl. No.	Name of Equipments	Date of purchase	Cost (Rs.in lakhs)	Present status
1.	Godrej copier	30-03-2001	80,234/-	Good condition
2.	Stabilizer	30-03-2001	6,000/-	’’
3.	Portable OHP	31-03-2001	23,920/-	’’
4	Honda make EBK 2000 generator	31-03-2001	32,800/-	’’
5	EB 833 Altimeter	25-02-2002	10,990/-	’’
6	Thomson TV 29’’ monitor	30-03-2002	28,700/-	’’
7	Thomson CD player	30-03-2002	6,500/-	’’
8	Sharp VCR	30-03-2002	12,300/-	’’
9	Computer and accessories	30-03-2003	72,513/-	’’
10	Public address system	26-02-2003	10,500/-	’’

11	Nikon Camera	29-09-2003	28,350/-	’’
12	Air Conditioner for computer hall	27-09-2003	10,500/-	’’
13	Photo display frame	27-09-2003	17,000/-	’’
14	Exhibition showcase	27-09-2003	14,000/-	’’
15	Scanner	27-09-2003	3,500/-	’’
16	Sony Digital Camera	2006	13,000/-	’’
17	Computer HP- with accessories	31.3.2007	36,000/-	’’
18	Motorized screen	2008	24,000/-	’’
19	Lexmark Printer	March 2008	15,043/-	’’
20	Printer (4 in one)	31.3.2009	13,950/-	’’
21	Sony DV cam – Portable camera	Jan-2010	1,84,000/-	’’
22	Lenovo Ideapad 103S	Feb-2011	21,600/-	“

VI. Details of SAC meeting conducted during 2010-11 – Not Conducted

Sl. No	**Date**	**Major recommendations of SACs which are to be implemented during 2010-11**
01	**-**	
02	**-**	

VII. Planning of SAC during 2011-12

Sl. No	**Date planned for conducting SAC meeting during 2011-12**
01	**June – 2011**
02	**December -2011**

VIII. Plan of Work for 2011-12

1. Operational areas details for 2011-12

Sl. No.	Taluk	Blocks/groups of villages	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas	Existing / New Please State without fail	If existing from which year Please state
1	Joida	Gunda	Paddy	Low yields, Poor soil fertility	INM	New	-
			Arecanut	Shallow water table	Drainage management	New	-
			Black pepper	Death of vines, improper processing, Lack of knowledge of IDM and INM	IDM	Existing	-
2	Sirsi	Hegadekatta	Arecanut	Low yields, Nut drop Pests and diseases	Soil Fertility Management	Existing	2009-10
		Vanalli	Paddy	Low yields, Poor soil fertility, Si deficiency symptoms	Nutrient Management	New	-
				Decline in soil organic matter content of soil	Soil Fertility Management	New	-
4	Ankola	Ankola	Green gram and Black gram	Low yields, Poor soil fertility	Soil Fertility Management	New	-
			Banana and Jackfruit	Unscientific method of drying agriculture & home products	PHT	New	-
5	Yallapur	Kiruvatti	Arecanut, Banana , Green gram, Black green gram and Black gram	Low yields, Poor soil fertility	Soil Fertility Management	New	-
6	Mundagod	Mundagod,Pala	Mango, Paddy,Maize,cotton	Poor soil fertility , Powdery mildew and mango hoppers	Production technology, inter cropping	New	-

2. Details of thrust areas under which interventions are planned for 2011-12

A.Crops

`	Crops to be covered	Interventions planned
Production technologies, pests and diseases management	Areca nut, Banana, Coconut, Pine apple, Black pepper, Ginger, Cashew, Mango, Onion, Vegetables	Trainings and Demonstrations
Value addition	Ginger, turmeric, black pepper, cardamom, cinnamon, nut meg,clove	Trainings
Integrated Nutrient Management	Paddy	Demonstration of INM technologies Trainings
Soil Fertility Management	Arecanut	Demonstration of STFR and NM Demonstration of HYV Trainings
	Green gram and Black gram	
	Black green gram	Demonstration of Mugad local (var.) and seed treatment
	Paddy	Testing of soil organic C and soil pH by Om kit

Nutrient management	Paddy	Demonstration of use of silicon Trainings
Insect pests and disease management in agriculture and horticultural crops	paddy, pulses, groundnut, cotton, ginger, arecanut, coconut, cocoa, maize	On and off campus trainings, FLD, OFT, Method demos
Production technologies, pests and diseases management	Areca nut, Banana, Coconut, Pine apple, Black pepper, Ginger, Cashew, Mango, Onion, Vegetables	Trainings and Demonstrations
Value addition	Ginger, turmeric, black pepper, cardamom, cinnamon, nut meg,clove	Trainings
Plant propagation	Black pepper	Trainings and Demonstrations
Soil testing and fertilizer recommendations	Arecanut, Paddy, Banana, Pine apple, Ginger	Trainings and Demonstrations

B.Livestock, poultry, fisheries

Thrust areas	Livestock/ poultry / fisheries to be covered	Interventions planned

C. Others

Thrust areas	Interventions planned

3.1. Abstract of Interventions Proposed Based On the Identified Problems during 2011-12

Crop/ Enterprise	Thrust area	Identified Problem	Planned Interventions					
			Title of technology to be assessed under OFT	Title of technology to be refined under OFT	Title of FLD	Title of the Training	Type of Extension activities	Details of technological products produced and supplied (specify name of product, variety, breed etc.)
Paddy	Soil Fertility Management	*Soil acidity *Low yield *Nutrient deficiencies and toxicities	Efficacy of Foliar Silicon in rice under Laterite soils	-	INM	• INM • Soil test based nutrient management • Use of WSF to supply nutrients through leaves	• Group meetings • Field visits • Trainings • Method Demonstrations • Result demonstrations • Field day	OFT: Technology: Si spray Source: Dept.of Soil Sci., UAS, Bangalore FLD : Technology: INM Source: UAS Dharwad
	Nutrient Mgmt	*Decline in organic matter content of soil	-	-	-	Organic Farming	• Group meetings • Field visits • Trainings • Method Demonstrations	Technology: Om kit Source: KVK, Sirsi UAS Dharwad
	Plant protection	Leaf folder, WBPH, Stem Borer, Gundy Bug, Blast	-	-	-	Identification of different stages of pests, Mode of action of entomopathogenic fungi, use of pheromones in pest management, installation of pheromone traps, IPM, Safe use of pesticides, eco friendly approaches in pest management	Field visits, method demos and field day	-

Arecanut	Production technology	Improper drainage management	-	-	-	Use of jalodhara mapaka in arecanut based inter cropping system to assess the depth of drainage canals	Training, Field visits	
	INM	Improper nutrient management	-	-	-	Role of macro and micro nutrients in areca nut	Training, Field visits	
	Plant protection	Root grub	-	-	Management of arecanut root grub through botanicals	Nature and damage by root grubs, biology and their integrated management in arecanut	Method demos on preparations of botanical pesticides, Campaigns	
	PHT	Drying method is unscientific and unhygienic	Assessment of solar drier for drying agri and home products	-	-	PHT	Training, Field visits Field day	-
	SFM	*Low yield *Nut drop *Deficiency of nutrients	-	-	Soil test based fertilizer application	Soil testing and fertilizer application	• Group meetings • Field visits • Trainings • Method Demonstrations • Result demonstrations • Field day	FLD : Technology: STFR Source: UAS Dharwad
Banana	Production technology	Under sized fingers				Importance of growth regulators in enhancement of size of banana fingers	Training, Field visits	
	Production technology	Fertigation	-	-	-	Importance of fertigation in banana	Training, Field visits	
	Production technology	Lack of prolinage technique	-	-	-	Importance of prolinage technique in management of pests and diseases in banana	Training, Field visits	
	Production technology	High cost staking material	-		Popularization of low cost staking material in banana	Scientific banana production technologies	Trainings ,Field visits	
Coconut		Drying method is unscientific and unhygienic	-	-	Value addition of ripe Banana	PHT	Training, Field visits Field day	-

	INM	Malnutrition	-	-	-	Role of macro and micro nutrients in coconut	Training, Field visits	
Pine apple	INM	Imbalanced nutrition	-	-	-	Role of macro and micro nutrients in pine apple	Training, Field visits	
	Production technology	Improper use of growth regulators	-		--	Role of growth regulators in synchronization of flowering	Training, Field visits	
Black pepper	Value addition	Improper processing and poor quality produce	-	-	Processing of quality black pepper	Processing methods for production of quality black pepper	Training, Field visits	
	Production technology	Poor quality planting material	-	-	-	Production of quality planting material through CMS method of propagation	Training, Field visits	
	Plant propagation	Death of vines	-	-	Plant propagation in Black pepper through CMS technology	1. CMS technology 2. Importance of growth regulators	Training, Field visits Field day	-
		Crop vanishing due to foot rot disease	-	-	Management of foot rot disease in Black pepper	IDM	Training, Field visits	-
Ginger	Production technology	Weeds menace	Management of weeds in ginger through pre emergent weedicides	-	-	Ginger production technologies	Trainings, field days, Field visits	
	IDM	Rhizome rot		-	-	Scientific production of ginger	Trainings, Field visits	
	Production technology	Lack of knowledge on Seed storage methods	--	-	-	Methods of storing quality ginger seeds	Trainings field visits ,	
Cashew	Production technology	Poor flower and fruit set , tea-mosquito menace , decreased size f nuts and yield	-	-	-	Production technologies for cashew	Trainings field visits ,	
	INM	Mal nutrition	-	-	-	Use of macro nutrients for obtaining higher yields in cashew	Trainings field days,	

Mango	IPM/IDM	Poor yields due to hoppers and powdery mildew	Use of plant extracts from bio digester for the management of hoppers and powdery mildew in mango	-	-	Role of plant extracts in managing pets and diseases of mango	Trainings field visits ,	
	Production technology	Non bearing of old and unproductive trees	-	-	-	Rejuvenation of old and unproductive trees through top working	Trainings Field visits	
Onion	Production technology	Under sized and un attractive bulbs poor yields	-	-	-	Scientific production of onion	Trainings, field visits,	
Vegetables	Production technology	Lack of knowledge on quality seedlings production	-	-	-	Role of community nurseries in quality seedlings production	Trainings	
Post Harvest technology	Value addition	Improper and unhygienic processing methods	-	-	-	Value addition to horticultural crop produces	Trainings	
Cocoa	Production technology	Level of pruning	-	-	-	Scientific production of cocoa as an inter crop in arecanut based inter cropping system	Trainings	
Turmeric	Production technology	Low yields	-	-	-	Production technologies for turmeric	Training	
Green gram and Black gram	SFM And Nutrient Mgmt	Low yield Local seeds No ICM	Use of Mo spray in green gram	-	ICM	Recommended cultivation practices of pulses	• Group meetings • Field visits • Trainings • Method Demonstrations • Result demonstrations • Field day	OFT : Technology : Mo spray Source : NFSM guidelines, GoI FLD : Technology: ICM Source: UAS Dharwad Var. Green gram: Pusa Baisaki Black gram: TAU-1

			Broad Bed furrow cultivation of pulses under protective irrigation	-	-	Cultivation practices of pulses	• Group meetings • Field visits • Trainings • Method Demonstrations	OFT : Technology : ICM Source: UAS Dharwad
Black green gram	SFM	Fallow after paddy	Cultivation of Black green gram after paddy	-	-	Cultivation practices of pulses	• Group meetings • Field visits • Trainings • Method Demonstrations	OFT : Technology : ICM Source: UAS Dharwad Var. Black green gram: Mugad local
Maize+Red gram	Intercopping	Sole crop Low yield Poor soil fertility	-	-	-	*Cultivation practices of maize and red gram *Transplanting technology of red gram	• Group meetings • Field visits • Trainings Method Demonstrations	OFT : Technology : Inter cropping Source: UAS Dharwad Spacing Source: ITK Transplanting Source: KVK, Bidar, Var. BSMR-736
cotton	Plant protection	Sucking insects	Mangement of sucking insects in Bt cotton	-	-	Diagnostic tools in identification of sucking insects and their damage, mode of action of systemic insecticides, ETL based pest management	Field visits, method demos	
Groundnut	Crop production	sucking insects, collar rot, leaf spot and rust			IPM in groundnut	Identification of insect pests and diseases, seed treatment, Management of insect pests and diseases	Method demos, field visits and field day	

3.2. Target set for number of interventions to be implemented during 2011-12

S. No	Particulars of intervention	Target number / Quantity
01	**On Farm Trial**	10
02	**Front Line Demonstration**	15
03	**Training Programmes**	
	Farmers and farm women	128
	Rural Youth	43
	Extension personnel	41
	Sponsored programmes	09
	Vocational Programmes	16
04	**Extension Programmes**	
	Field Day	15
	Kisan Mela	2
	Kisan Ghosthi	6
	Exhibition	6
	Film Show	2
	Method Demonstrations	20
	Seminars	2
	Workshop	2
	Group meetings	25
	Lectures delivered	35
	Newspaper coverage	28
	Radio coverage	10
	TV coverage	05
	Radio Programmes	12
	TV Programmes	02
	Publications	05
	Popular articles	20
	Extension Literature	10
	Advisory Services	200
	Scientific visit to farmers field	50
	Farmers visit to KVK	525
	Diagnostic visits	12
	Field visits	50
	Exposure visits	04
	Ex-trainees meet	03
	Agriculture Camps	
	Clinic day	
	Soil health Camp	12
	Animal Health Camp	
	Agri mobile clinic	

	Soil test campaigns	02
	Farm Science Club Conveners meet	05
	Self Help Group Conveners meetings	02
	Mahila Mandals Conveners meetings	10
	Special Day celebrations	05
	Awareness campaigns	
	Others (Pl. specify)	
05	**Production and supply of seed materials**	
	1) Cereals	
	ii) Oilseeds	
	iii) Pulses	100 q(Farmers Participation)
	iv) Vegetables	
	v) Flower crops	
	vi) Others (Specify)	
	Production and supply of Planting materials	
	Fruits	
	Spices	
	Vegetables	
	Forest species	
	Ornamental crops	
	Plantation crops	
	Others	
	Production and supply of bio-products	
	Bio agents	
	Bio fertilizers	
	Bio pesticides	
	Production and supply of livestock material	
	Sheep	
	Poultry birds	
	Goat	
	Fisheries	
	Others (Specify)	
06	**Number of soil samples to be analyzed**	300
07	**Number of water samples to be analyzed**	25

.4 Plan of Technology Assessment and Refinement for 2011-12

(***You are requested to prepare a detailed proposal for each OFT as per the Following guidelines for assessment and refinement and include in the main document itself***)

Assessment 1

a. Title of Technology Assessed: **Use of plant extracts from bio digester for the management of hoppers and powdery mildew in mango**
b. No. of trials: **03**
c.Problem Definition : Need for management of pest and diseases through organic means.
d.Production system and thematic area: **Rain fed , Organic management of pest to have residue free produce**

Details of the technologies with budget for critical inputs **Technology Options**	**Details of the technology assessed**	**Area in ha.**	**Year of release of the Technology Option ***	**Source of the technology**	**Major Parameter of assessment**	**Other Parameters**	**Critical Inputs for Technology**			
							Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1. Farmer's practice	Non adoption of scheduled practices	0.2	-	Farmers	% fruit set /sq mt, % incidence of pests and diseases	Yield	NIL			
2.Recommeded practice	2 sprays of Monocrotophos + Hexaconozole	0.2 (24 plants)	-	UAS Dharwad	% fruit set /sq mt, % incidence of pests and diseases	Yield	Monocrotophos Hexaconozole	½ Litre each	400/litre 700/ltr	200 350
3. Alternate practice	Bio digester extract (KVK Model) @ 1:4	0.2 (24 plants)	-	OFT 10-1l	% fruit set /sq mt, % incidence of pests and diseases	Yield	Bio-digester e Jaggery Neem cake Groundnut cake	1 no. 2kg 2 kg 2kg	1650/unit 40.00/kg 10.00/kg 30.00/kg	1650 80 20 60
Total (Rs)										**2360**

f. Cost per trial in Rs.2360/-
g. Total cost for the assessment in Rs**.2360X 3= Rs. 7080/-**

Assessment 2

a.Title of Technology Assessed: **Management of weeds in ginger through pre- emergent weedicides**

b. No. of trials: **03**

c. Problem Definition : Managing weeds in ginger mannually is expensive

d. Production system and thematic area: **Protected irrigation . Weed management**

e. Details of the technologies with budget for critical inputs

Technology Options	**Details of the technology assessed**	**Area in ha.**	**Year of release of the Technology Option ***	**Source of the technology**	**Major Parameter of assessment**	**Other Parameters**	**Critical Inputs for Technology**			
							Name	**Qty.**	**Unit Cost (Rs.)**	**Total Cost (Rs.)**
1. (Farmer's practice)	Mulching with green leaves and hand weeding	0.02	-	Farmers	Weed density and weed bio -mass per sq.m.	Yield	NIL			
2.Recommeded practice	Mulching with green leaves @ 37.5 tonnes/ha	0.02	-	IISR Calicut	Weed density and weed bio - mass per sq.m.	Yield	-	-	-	-
3. Alternate practice	Butachlor @ 1.5kg ai/ha	0.02	-	Found promising in KVK expt. Trial during 2010-11	Weed density and weed bio - mass per sq.m.	Yield	Butachlor	100ml	500/litre	175
	Alachlor @ 1.5kg ai/ha	0.02	-	Found promising in KVK expt. Trial during 2010-11	Weed density and weed bio- mass per sq.m.	Yield	Alachlor	100ml	800/litre	200
	Diuron @ 1.0 kg ai/ha	0.02	-	Found promising in Horticultural Staff Research project (2010-11)	Weed density and weed bio- mass per sq.m.	Yield	Diuron	125g	800/kg	250
Total (Rs)										**625**

f. Cost per trial in Rs.625/-

g. Total cost for the assessment in Rs.**625*3=1875/-**

Assessment 3

a. Title of Technology Assessed : Evaluation of Foliar Silicon in rice under laterite soils

b. No. of Trials : 5

c Problem Definition :Yield reduction due to deficiency of Si in laterite soils

d Production system and thematic area :Rainfed, Nutrient management

e Details of the technologies with budget for critical inputs

Technology Options	Details of the technology to be assessed	Area in ha.	Year of release of the Technology Option *	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
							Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1. (Farmer's practice)	No Si supply	0.2	-	Farmer	Yield(both grain & straw)	Growth(Panicle Length, No. of tillers etc.) Observation on insect & disease occurrence	NIL			
2 RP	Rice husk ash with RDF	0.2	-	NIIR Project Consultancy Services (NPCS), New Delhi , UAS,Bangalore	Yield (both grain & straw)	Growth(Panicle Length, No. of tillers etc.), Observation on insect &disease occurrence	Husk Ash	0.5 ton	1000	500
3 AP	Spray of Si @ 4 mL/L with RDF	0.2	2010	UAS Bangalore. Successful OFT of KVK,Sirsi 2010-11	Yield(both grain & straw)	Growth(Panicle Length, No. of tillers etc.) Observation on insect & disease occurrence	$OSAB_3$ Soil Testing	400 ml 1	Testing material provided by UASB 225	225
										725

f. Cost per trial in Rs.725

g. Total cost for the assessment in Rs.3625.00

Assessment 4

a.Title of Technology Assessed : Molybdenum spray to increase the nodulation in Green gram

b. No. of Trials : 5

c. Problem Definition : Poor nodulation in pulses in lateritic soils due to deficiency of Mo which leads to Low yields

d. Production system and thematic area : Paddy-Green gram and nutrient management

e. Details of the technologies with budget for critical inputs

Technology Options	Details of the technology to be assessed	Area in ha.	Year of release of the Technology Option *	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
							Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1. (Farmer's practice)	No Mo supply	0.1	-	Farmer	Yield	Growth, Nodulation	NIL			
2 RP	Rhizobium	0.1	-	UAS,Dharwad	Yield	Growth, Nodulation	Rhizobium	38g	30/kg	1.5
3 AP-1	Mo spray @ 0.2% , 3 sprays@ 10 days interval	0.1	2010	NFSM guidelines , GoI	Yield	Growth, Nodulation	Ammonium. Molybdate Rhizobium Soil testing	40 g 38g 01	500 / 100 g 30/kg 225	200 1.5 225
										228

f. Cost per trial in Rs.228

g. Total cost for the assessment in Rs.1140

Assessment 5

a. Title of Technology Assessed : Cultivation of Black green gram after paddy

b. No. of Trials : 4

c Problem Definition : After paddy, fields left fallow. Nearly 60000 to 65000 ha is under paddy in the district

d Production system and thematic area : Paddy-Green gram. Resource management

e Details of the technologies with budget for critical inputs

Technology Options	Details of the technology to be assessed	Area in ha.	Year of release of the Technology Option *	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
							Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1. (Farmer's practice)	Fallow	0.2	-	Farmer	Yield	Growth	NIL			
2 RP	Green gram direct sowing	0.2	-	UAS Dharwad	Yield	Growth	Green gram seeds (Pusa Baisaki)	5 kg	100	500
3 AP-1	Black green gram	0.2	-	UAS Dharwad. Successful OFT of 2010-11	Yield	Growth	Black green gram seeds (Mugad local) Soil Testing	5 kg 1	60 225	300 225
										1025

f. Cost per trial in Rs.1025

g. Total cost for the assessment in Rs.4100.00

Assessment 6

a. Title of Technology Assessed : Production technology of Green gram under irrigation in paddy fallows

b. No. of Trials : 5

c. Problem Definition : After paddy, fields left fallow. Nearly 60000 to 65000 ha is under paddy in the district out of which 100 ha is irrigable

d. Production system and thematic area: Irrigated. Resource management

e. Details of the technologies with budget for critical inputs

Technology Options	Details of the technology to be assessed	Area in ha.	Year of release of the Technology Option *	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
							Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1. (Farmer's practice)	Fallow	0.2	-	Farmer	Yield	Growth	NIL			
2 RP	Green gram Line sowing	0.2	-	UAS Dharwad	Yield	Growth	Green gram seeds (Pusa Baisaki) Lime	5 kg 1 q	100 350/q	500 350
3 AP-1	Green gram Broad bed furrow sowing	0.2	-	ICAR Research Bulletin - 2006	Yield	Growth	Green gram seeds (Pusa Baisaki) Lime Soil testing	5 kg 0.5 q 1	100 350/q 225	500 175 225
										1750

f. Cost per trial in Rs.1750

g. Total cost for the assessment in Rs.8750.00

Assessment 7

a. Title of Technology Assessed : Production of Fodder bajra and Legume mixture as source of nutrient rich green fodder during summer

b. No. of Trials : 05

c Problem Definition : Scarcity of green fodder

d Production system and thematic area : Rainfed & residual moisture

e Details of the technologies with budget for critical inputs

Technology Options	Details of the technology assessed	Area in ha.	Year of release of the Technology Option *	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
							Name	**Qty.**	**Unit Cost (Rs.)**	**Total Cost (Rs.)**
1. FP	Fallow 80-90%	-					NIL			
2. RP	RP: Guinea grass	0.10 ha		UAS,Dharwad	Yield of green fodder, No. of harvesting,	farmers feed back, milk yield	*Fodder Bajra*	4Kg	60.00	240.00
3. AP	Fodder bajra and legume(4:1)	0.10 ha		Farmers of Belgaum. Successful OFT of 2009-10 & 2010-11	Yield of green fodder, No. of harvesting,	farmers feed back, milk yield	Legume mixture Soil Testing	1.Kg 1	100-00 225	100.00 225.00
							Total			565-00

f. Cost per trial in Rs. 565-00

g. Total cost for the assessment in Rs.2825-00

Assessment 08

a. Title of Technology Assessed — **Management of gall midge, *Orselia oryzae* in paddy**

b. No. of trials — 05

c. Problem Definition — Gall midge, *Orselia oryzae* damage in paddy

d. Production system and thematic area — Rainfed, plant protection

e. Details of the technologies with budget for critical inputs

Technology Options	Details of the technology assessed	Area in ha.	Year of release of the Technology Option *	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
							Name	**Qty.**	**Unit Cost (Rs.)**	**Total Cost (Rs.)**
1. (Farmer's practice)	Application of granular insecti ides either carbofuran or phorate only to main field	0.2	-		No of galls per hill	Yield both grain and straw (q/ha)	NIL			
2 (Recommended practice)	Application of granular insecti ides both in nursery (1.25 Kgs of carbofuran before sowing for 300 sq. mt seed bed) and main field (18 kg carbofuran/ha at 12-15 DAT)	0.2	UAS, Dharwad		No of galls per hill	Yield both grain and straw (q/ha)	Carbofuran 3G	4 Kg	60/kg	240.00
3 (Technology option)	Seedling root dip treatment with 0.02 % (1ml/l) chlorpyrifos 20 EC, for 12 hrs and in main field application of carbofuran 3 G 0.5 Kg ai.ha at 10-15 DAT	0.2	KAU, Kerala 2002		No of galls per hill	Yield both grain and straw (q/ha)	Chlorpyrifos 20 EC Carbofuran 3 G	25 ml 3.0 Kg	350 /l 60/kg	10.00 180.00
							Total (Rs)			430.00

f. Cost per trial in Rs. 430.00

g. Total cost for the assessment in Rs. 430.00 X 05 =2150.00

Assessment 09

a. Title of Technology Assessed**: Bird pepper (*Capsicum frutescence*) as an income generating activity**

b. No. of trials: **05**

c. Problem Definition : Providing subsidiary income to the farmer

d. Production system and thematic area: Income generating activity targeted to women

e. Details of the technologies with budget for critical inputs

Technology Options	**Details of the technology assessed**	**Area in ha.**	**Year of release of the Technology Option ***	**Source of the technology**	**Major Parameter of assessment**	**Other Parameters**	**Critical Inputs for Technology**			
							Name	**Qty.**	**Unit Cost (Rs.)**	**Total Cost (Rs.)**
1. (Farmer's practice)	Collecting from wild plants	50 plants		-	Germination % of Seed, Plant growth, Yield of fruits in grams/plant	-	-	-	-	-
2.Recommeded practice	Nil	Nil		-		-	-	-	-	-
3. Alternate practice	Systematic cultivation of bird pepper as mixed crop in arecanut garden	50 plants		ITK : Vinoda Bhat of Gadigehole	Germination % of Seed, Plant growth, Yield of fruits in grams/plant, Income Generation	Income	seedlings	50	2/seedling	100
Total (Rs)										**100**

f. Cost per trial in Rs.100/-

g. Total cost for the assessment in Rs.**100x 5=500/-**

Refinement 01

a. Title of Technology refined : **Solar drier for drying agri and home products**

b. No. of Trials : 03

c Problem Definition : **Unhygienic and unscientific drying, time taken is more and quality of product is poor**

d Production system and thematic area : **Rain fed , Arecanut-Banana- Jackfruit**

e Details of the technologies with budget for critical inputs

Technology Options	Details of the technology assessed	Area in ha.	Source of the technology	Major Parameter of assessment	Other Parameters	Critical Inputs for Technology			
						Name	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
1. Best Performing Technology Option in Assessment	Solar Drier	03	H.G.Hegde	Temperature, Initial & Final moisture content, Time taken for drying	Quality parameter	Solar Drier	-	-	-
2 Best performing Technology Option in Assessment (**rare case)**									
3.Refineemnt proposed	Solar Drier	03	H.G.Hegde	Temperature, Initial & Final moisture content, Time taken for drying	Quality parameter	Solar Drier	01	8000	8000

f. Scientific Rationale / Justification for refinement proposed : 1. Improving the quality of the raw material used in fabrication to improve the hygiene & quality
2. Improve the air draft
3. To avoid rain splash

g. Cost per trial in Rs. : 8000.00

h. Total cost for the refinement in Rs. 8000 X 03 = 240000.00

5. Frontline Demonstrations

Category	Problem identified	Thematic area	Current status of yield q/ ha / number / litres/unit / kg/unit			Technology to be demonstrated	Source	Year of release	Local check	Area in ha / No. of units / animals /birds	No. of demonstrations	Critical inputs to be provided per demonstrations		Total cost for all demonstrations
			District average	Potential	Farmers							Name & Quantity (kg/ha) or number/unit	Cost (Rs./ha) or Rs./unit	
Oilseeds														
Groundnut	Labour problem, deshelling is painful	Drudgery reduction	10 q/ha	20q/ha	12q/ha	Popularisation of groudnut decorticator	UAS	-	Manual shelling	3	3	Ground nut decorticator	5000	15000
	Problem of insects pests and diseases, poor peg penetration and poor yields	Crop management	10 q/ha	20q/ha	12q/ha	ICM	UAS, Dharwad	-	Farmers Practice	5	12	Carbaxin 75 WP, 3g/Kg Seeds – 300 g/ha Rhizobium-2.5 Kg/ha Gypsum - 500 kg/ha Profenophos 50 EC, 2ml/l -1 L / ha *N.rileyi* $1X10^{11}$conidia /g @ 2 g/l - 1 kg/ha Difenaconazole 25 EC, 1ml/l - 500 ml/ha Soil testing	420.00 75.00 1700.00 490.00 300.00 1400.00 225	4685.00 X5 =23425.00
Pulses														
Blackgram	Low yield, poor soil fertility, Pest and diseases	ICM	10 q/ha	20 q/ha	8 q/ha	ICM	UAS Dharwad		No ICM	10	20	Seeds -20 kg (DU-1) Rhizobium-375 g PSB – 375 g Tricoderma-80 g Rock phosphate-1q Chlorpyriphos 1 L Soil Testing	1400 15 15 200 350 500 225	2705 / ha 27050 / 10 ha

Green gram	Low yield, poor soil fertility, Pest and diseases	ICM	8 q/ha	15 q/ha	6 q/ha	ICM	UAS Dharwad		No ICM	10	20	Seeds -20 kg (P.Baisaki) Rhizobium-375 g PSB – 375 g Tricoderma-80 g Rock phosphate-1q Chlorpyriphos 1 L Soil Testing	2000 15 15 200 350 500 225	3305 / ha 33050 / 10 ha
Cereals & millets														
Paddy	Low yield, Poor soil fertility, Deficiency of nutrients	INM	22 q/ha	35 q/ha	20 q/ha	INM	UAS Dharwad		No INM	10	20	Rock phosphate-3.5 q MOP-1.5 q Azospirillum-375 g PSB-375 g ZnSO4-20 kg WSF-10 kg SSP-5 kg Soil Testing	1200 675 15 15 900 1200 20 225	4250 X 10 = 42500
	Labour intensive and expensive	Drudgery reduction and promotion as IG activity	47	60	35	Popularisation and use of mechanised paddy transplanter as IG activity through commodity groups		-	Manual transplanting	5 ha	10	hiring charges Soil Testing Plastic sheets	3000/ha 225 500	3725 X 5 18625-00
	low yield, Incidence of stem borer, WBPH, leaf folder, gundy bug and Blast	Crop protection	47 q/ha	60 q/ha	35 q/ha	IPM	UAS, Dharwad and DRR Hyderabad		Without integrated approach	5	12	Carbendazim 150g/ha Tricyclazole-500g/ha Pheromone traps with *Scirpophaga incertullas* lures-8 traps + 32 lures Chlorpyrifos 20 EC – 2 l/ha *N. rileyi* ($1X10^{11}$conidia /ml @ 1g/l) – 2 kg/ha Malathion 50 EC – 1.5 L/ha Soil Testing	120.00 750.00 800.00 700.00 650.00 600.00 225.00	3845X5 = 19225.00

Fruit														
Banana	High cost for wooden poles	Production technology	30 t/ha	70/ha	45t/ha	Popularization of low cost staking material in banana	Successful OFT during 2007-08	-	Staking with wooden poles	300 plants	3	Polythene packaging strip -60 kg	Rs.35/kg	**6300**
Spices and condiments														
Black pepper	Poor and low quality produce	Value addition	900kg	2740 kg	1800 kg	**Processing of quality black pepper**	UAS D	2010	Dipping of berries/panicles in hot water for one minute and then sun drying	-	15	200 gauge UV resistant polythene sheet @ 14sq.m/farmer	Rs. 50/sq. mt	**10500**
	Death of vines	IDM	3 q	10 q	2 q	**Compost +Neem cake+Trichoderma+Plastic mulching**	Successful OFT conducted by KVK, Sirsi	2008-09, 2009-10 and 2010-11	Mulching with forest litter	25 vines per farmer	10	200 gauge UV resistant polythene sheet @ 1.25 sq.m /vine Neem cake 1 kg / farmer Trichoderma 50g/vine Soil Testing	1720.00 /farmer 200 /farmer 150/farmer 225	2295.00 X10 = 22950.00
	1. Poor rooting in direct plating 2. Poor quality plating material	Plant propogation	3 q	10 q	2 q	Plant propagation through CMS technology	Modified IIHR technology as per ARS (Pepper)	2005	Direct planting of vine cuttings	1 unit (200 vines) per farmer	25	Plastic Bags (3'x2') – 1 bag/farmer Rooting hormone-(IBA) 5g/farmer Bavastine-10 g GI wire 1 m / unit Pepper cuttings Burnt earth	2.00 5.00 10.00 10.00 Farmer Farmer	675.00
Cotton	Sucking insects (aphids, thrips, and mirid bug) menace in bt cotton	Crop protection	14	30	18	Management of sucking insects in Bt cotton	UAS, Dharwad		Chemical control without scientific base	10	25	Acetamaprid 20 SP, 0.2 g/l – 100g/ha Acephate 75 Sp, 1g/l – 500 g/ha	375.00 250.00	6250.00
Plantation crops														
Arecanut	Low yield	Soil Fertility	25 q/ha	35 q/ha	20 q/ha	Soil Test Based Fertilizer use in	UAS Dharwad		No soil testing	10	20	Rock phosphate-2.5 q MOP-3.5 q	875 1575	3550X10

	Nut drop Laterite Soils Micro Nutrient deficiency	Management				Arecanut						ZnSO4 - 8 kg Borax – 4 kg Dolomite-5q Soil Testing	350 400 350 225	+ 4500 =40000.00
	Infestation by root grubs, low yield, death of palms	Crop protection	25 q/ha	35 q/ha	20 q/ha	Management of arecanut root grub through botanicals	UAS Dharwad	2010-11,	Chemical control without scientific base	50 trees per farmer	5	Neem oil – 8L Soap nut – 8 Kg	800.00 160.00	960.00 X 5 = 4800.00
Implements														
Fuel efficiency& drudgery reduction	High Fuel cost and time consuming	Fuel efficiancy	-	-	-	Popularisation of Fuel efficient eco friendly chula	-	-	Traditional chulahs	03	3	3	2000	6000-00
Vegetables														
Xanthosoma Sagittifolium	Low yielding varieties	Food security & nutrition, Income generation	-	-	-	Popularization of **Xanthosoma Sagittifolium as a subsidiary income generating activity**	UAS, Dharwad POP	2010-11	Local Variety	05	05	**Xanthosoma Sagittifolium** seed material 5 kg	150	750.00

6. Training Programmes

6.1. Plan of training programmes for Farmers/ Farm Women during 2011-12

Crop / Enterprise	Major problem	Identified Thrust Area	Training Course Title*	No. of Courses	Skill to be transferred
Paddy	Low yield, Poor soil fertility, Nutrient deficiency	Soil Fertility Management	• INM • Soil test based nutrient management • Use of water soluble fertilizer • Silicon an essential nutrient for rice	2 4 2 2	Seed treatment with biofertilizer And seedling treatment with SSP
	Incidence of Insect pests (Gall midge, stem borer,WBPH, leaf folder, gundy bug)	Integrated management	Use of pheromone technology in management of stem borer, Identification of different stages of insect pests and damage caused,	10	Installation of traps, spraying techniques, Preparation of spray mixtures
	Labour problem	Drudgery reduction	Use of paddy transplanter for drudgery reduction and promotion as IG activity.	5	Dapog method of seed bed preparation
Arecanut	Low yield, Nut drop	Soil Fertility Management	• Soil testing and fertilizer application	2	Method of fertilizer application
	Poor drainage	Water management	Use of jalodhara mapaka in arecanut based inter cropping system to assess the depth of drainage canals	02	Assessment of depth of drainage canals using jalodhara mapaka
	Malnutrition	INM	Role of macro and micro nutrients for obtaining higher yields in arecanut	02	Method and quantity of fertilizer application
	Poor quality seedlings	Production technology	Production of quality seedlings	01	Mother palm and seed nut selection
	Improper method of Bordeaux mixture preparation	Disease management	Scientific preparation of Bordeaux mixture	02	Preparation methodology
	Root grub	Integrated management	Integrated management	02	Identification of different stages of rootgrubs, preparation of plant extracts
Om soil testing kit	Decline soil organic matter	Soil Fertility Management	• Testing of Organic matter and pH by Om kit	4	Soil Testing by Om kit
Pulses	Low yield Use of local seeds Fallow No ICM Mo deficiency	Soil Fertility Management	• Recommended cultivation practices of pulses	4	Seed treatment with biofertilizer and Mo
Maize+Red gram	Sole crop Low yield	Intercropping and sowing/transplanting	• Cultivation practices of Maize+red gram • Transplanting technology of red gram	2 2	Raising Nursery of red gram and Transplanting

Coconut	Lack of knowledge on selection of quality mother palm and seed nut	Production technology	Selection of mother palms and nuts to obtain quality seedlings	01	Mother palm and seed nut selection
	Malnutrition	INM	Role of macro and micro nutrients for obtaining higher yields in coconut	01	Method and quantity of fertilizer application
Cocoa	Level of pruning	Production technology	Scientific production of cocoa as a profitable intercrop in arecanut based inter cropping system	01	Pruning methodology
	Improper and unhygienic processing	Value addition	Processing of quality cocoa beans	01	Method of processing
	Mealy bug, rats and squirrel	Plant protection	Community efforts to combat the damage by rats and squirrels, Management of mealy bug through predators	03	Identification of natural enemies of mealy bug
Black pepper	Unhygienic and poor quality processing	Value addition	Processing methods for production of quality black pepper	03	Method of processing
	Poor quality planting material	Production technology	Production of quality planting material through CMS method of propagation	02	Production technology
	Low yields	Production technology	Scientific production of black pepper	01	Selection of disease free seedlings
	Poor quality and low market price	Value addition	Processing of peeper berries/panicles in between polythene sheets	02	Processing methodology
	Foot rot	IDM	Management of Foot rot in Black pepper	03	Method of processing
Banana	Poor quality planting material	Plant propagation	CMS technology for production of quality material	02	Production technology
	Low yields	Production technology	Scientific production of black pepper	01	Selection of disease free seedlings
	Poor quality and low market price	Value addition	Processing of peeper berries/panicles in between polythene sheets	02	Processing methodology
	Improper spacing	Production technology	Scientific banana production technologies	02	Lay out and planting methodology
	High cost of staking material	Production technology	Innovative techniques in banana production	02	Innovative technologies
	Monkey menace	Crop Protection	Management of banana crop from monkey damage	01	Preparation of growth regulator solution
Mango	Poor yields due to hoppers and powdery mildew menace	IPM/IDM	Role of plant extracts from bio-digester in managing pests and diseases of mango	02	Preparation of bio-digester extract
	Non bearing of old and unproductive trees	Production technology	Rejuvenation of old and unproductive trees through top working	01	Rejuvenation technology
	Hoppers and powdery mildew	Pest and disease management	Management of pests and diseases through use of bio digester extract	02	Preparation methodology
Pine apple	Imbalanced nutrition	INM	Role of macro and micro nutrients in pine apple	02	Quantity and method od application of fertilizers
	Improper use of growth regulators	Production technology	Role of growth regulators in synchronization of flowering	01	Preparation of growth regulators solution

Ginger	Weeds menace	Production technology	Management of weeds in ginger through pre emergent weedicides	02	Weed management technology -
	Rhizome rot	IDM	Scientific production of ginger	02	Disease management technology -
	Lack of knowledge on seed storage methods	Production technology	Disease free storage structures in ginger	02	Storage methodology
Turmeric	Low yields and un hygienic processing methods	Production technology and value addition	Scientific production of turmeric	01	Plant protection and value addition
Cashew	Decreased size f nuts and yield	Production technology	Production technologies for cashew	02	Production technique
	Mal nutrition	INM	Use of macro nutrients for obtaining higher yields in cashew	02	Quantity and method of application of fertilizers
	Insect pests (Tea mosquito bug and stem borer)	Plant protection	Management of tea mosquito bug and stem borer	02	Awareness on spray schedules, damage caused by tea mosquito bug and stem borer
Onion	Under sized and un attractive bulbs poor yields	Production technology-	Scientific production of onion	02	Preparation and spray of growth regulators
Vegetables	Lack of knowledge on quality seedlings production	Production technology	Role of community nurseries in quality seedlings production	02	Solarization technology
Post harvest technology and value addition	Unhygienic and improper method of processing	Value addition	Value addition to horticultural crop produces	02	Processing methodology
Groudnut Groundnut	Labour problem	Drudgery reduction	Popularisation of groundnut decorticator	3	Method of using Decorticator
	Insect pests (leaf miner, leaf feeding insects) and diseases (collar rot, leaf spot, rust)	Plant protection	Management of sucking insects, use of entomopathogenic fungi in management of leaf feeding insects	04	Identification of insect pests and diseases,
Cereals and Pulses	Storage Pests	Storage method	Use of environment friendly and scientific storage methods	3	Storage methods
Fruits and Vegetales	Wastage and low price	Processing and value addition	Processing and value addition of fruits and vegetables	6	Value addition skills
Mushroom	Less knowledge	Suitable environment for cultivation	Mushroom cultivation	2	Cultivation methods
	Low marketing knowledge	Income generating activities SHG	IG activities	3	-
Cotton	Insect pests (sucking insects and boll worm)	Plant protection	Identification of insect pests, Management of sucking insects	04	Bt cotton seed sowing methods, Preparation of spray mixtures

6.2. Plan of training programmes for Rural Youth during 2011-12

Crop / Enterprise	Major problem	Identified Thrust Area	Training Course Title*	No. of Courses	Skill to be transferred
Paddy	Labour problem	Drudgery reduction	Use of paddy transplanter for drudgery reduction and promotion as IG activity.	2	Dapog method of seed bed preparation
Arecanut	Poor quality seedlings	Production technology	Production of quality seedlings	01	Mother palm and seed nut selection
	Improper processing and drying	Value addition	Processing of quality nuts	02	Processing methodology
	Poor quality seedlings	Production technology	Production of quality seedlings	01	Mother palm and seed nut selection
Cocoa	Level of pruning	Production technology	Scientific production of cocoa	01	Level of pruning
	Improper processing	Value addition	Processing of quality cocoa beans	02	Method of processing
Banana	Low yields	Production technology	Innovative techniques in banana production	01	Planting methodology and fertilizer management
	Poor and unhygienic drying	Production technology	Innovative techniques in banana production	01	Planting methodology and fertilizer management
Coconut	Poor quality seedlings	Production technology	Production of quality seedlings	01	Quality nuts selection and raising of nursery
Black pepper	Poor quality seedlings	Production technology	Production of disease free seedlings	01	Selection of planting material and propagation methodology
	Poor quality processing and low market price	Value addition	Processing of quality produce on community basis	02	Processing methodology
Ginger	Low yields and income	Production technology	Scientific production of ginger	01	Disease management methodology
	Lack of knowledge on bi-products of ginger	Value addition	Processing of ginger and its its bi- products	02	Processing technology
Pine apple	Low yields	Production technology	Synchronization of flowering in pine apple	01	Planting methodology and preparation of growth regulators
Cashew	Lack of knowledge on processing	Value addition	Processing of nuts to get quality produce	02	Processing methodology

Mango	High cost of seedlings	Plant propagation	Production of quality seedlings through asexual means of propagation	02	Propagation methodology
Onion	Non availability of quality seeds	Production technology	Seed production techniques in onion	01	Seed production through maintaining isolation distance
Turmeric	Improper curing	Value addition	Processing of quality turmeric	01	Processing methodology
Fruits and vegetables	High cost processed products	Value addition	Processing of jam, jelly, marmalades, ketchups etc..	01	Processing technology
Plant propagation	Poor quality seedlings	Plant perpetuation	Production of disease free seedlings in pepper ,cardamom	01	Production technology
Om soil testing kit	Decline soil organic matter	Soil Fertility Management	Testing of Organic matter and pH by Om kit	2	Soil Testing by Om kit
Groundnut	Labour problem	Drudgery reduction	Popularization of groundnut decorticator	2	Method of using Decorticator
Biopesticides	Non availability of biopesticides	Biological control	Importance of biopesticides in pest management	02	Identification of diseased specimens, methods of preparation

6.3. Plan for training programmes for Extension Personnel during 2011-12

Crop / Enterprise	Identified Thrust Area	Organization	Training Course Title	No. of Courses	Skill to be transferred
Arecanut	INM	KSDA/KSDH/NGO's	Importance of macro and micro nutrients in arecanut	01	Method and quantity of fertilizers application
	Preparation of Bordeaux mixture	KSDA/KSDH/NGO's	Scientific way of preparation of bordeaux mixture	02	Preparation methodology
	Propagation	KSDA/KSDH/NGO's	Scientific method of production of quality seedlings	01	Method of selection mother palm, seed nuts and production technology
	Water management	KSDA/KSDH/NGO's	Management of drainages in arecanut based inter cropping system	02	Use of jalodhara mapaka to assess depth of drainage canals
	Water management	KSDA/KSDH/NGO's	Drainage planning in arecanut	02	Measuring ground water level, Designing drains
Banana	Production technology	KSDA/KSDH/NGO's	Innovative techniques in banana production	02	High density planting and innovative technologies
	PHT	KSDA/KSDH/NGO's	Processing of agri and Horti produce	02	Drying technology
Ginger	Weed management	KSDA/KSDH/NGO's	Management of weeds through pre emergent weedicides	01	Weed management methodologies
	Seed storage	KSDA/KSDH/NGO's	Ginger production technologies	01	Storage methodologies

Black pepper	Plant propagation	KSDA/KSDH/NGO's	Production of quality planting material in pepper	01	Propagation methodology
	Production technology	KSDA/KSDH/NGO's	Disease free production technologies in pepper	01	Training techniques
	Value addition	KSDA/KSDH/NGO's	Processing of pepper in between polythene sheet	02	Processing methodology
	Plant propagation	KSDA/KSDH/NGO's	Production of quality planting material in pepper	01	Propagation methodology
	Production technology	KSDA/KSDH/NGO's	Disease free production technologies in pepper	01	Training techniques
	Value addition	KSDA/KSDH/NGO's	Processing of pepper in between polythene sheet	02	Processing methodology
Mango	IDM and IPM	KSDA/KSDH/NGO's	Use of bio digester extract in management of pests and diseases in mango	01	Bio-digester extract preparation technology
	Production technology	KSDA/KSDH/NGO's	Production technologies for mango	01	Method
Onion	Production technology	KSDA/KSDH/NGO's	Scientific production of onion for higher yields	01	Use of growth regulators
Pine apple	Production technology	KSDA/KSDH/NGO's	Use of growth regulators in synchronization of flowering in pine apple	01	Growth regulators usage
	Production technology	KSDA/KSDH/NGO's	Production technologies for pine apple	01	Planting methodology
Coconut	Production technology	KSDA/KSDH/NGO's	Selection of mother palm and seed nuts	01	Production technology
Cashew	Production technology	KSDA/KSDH/NGO's	Production technologies for cashew	01	Planting methodology
Cocoa	Production technology	KSDA/KSDH/NGO's	Scientific production of cocoa as inter crop in arecanut	02	Production technology
Vegetables	Production technology	KSDA/KSDH/NGO's	Production of summer vegetables	01	Production technology
Om soil testing kit	Soil Fertility Management	DoH, DoA, SHGs/NGOs	Testing of Organic matter and pH by Om kit	2	Soil Testing by Om kit
-	Women and Child care	NGO's, Women and child development department	Care of neonate,infants,pregnant and lactating mother	2	Nenate care Methods And nutritional knowledge
Field crops	Drudgery reducing equipments	Agriculture dept	Use of drudgery reducing equipment in paddy and groundnut	3	Dapog method of seed bed preparation
Processing	Fruits and vegetables	Horticulture dept, NGO	Processing methods and demonstration of fruits and vegetable processing	2	Method of using Decorticator

6.4. Plan of vocational training programmes for Young Farmers during 2011-12

Crop / Enterprise	Identified Thrust Area	Training title*	No. of programmes and Duration (days)	Skill to be transferred
Plant propagation	Production technology	Production of planting materials through sexual and asexual means	02(02 days)	Propagation methodologies
Processing	Value addition	Value addition to horticultural crop produces	02 (02days)	Processing methodology
Land scape gardening	Production technology	Importance of land scope gardening and Topiary making	02(02 days)	Root coiling technique
Om soil testing kit	Soil Fertility Management	Testing of Organic matter and pH by Om kit	2 2 days	Soil Testing by Om kit
-	Income generation activity and commodity farming	Tailoring and dress designing	15 days (2 programmes)	Dress designing
-	Income generation activity and commodity farming	Bakery training	3 days(2 programmes)	Preparation of bakery items
-	Income generation activity and commodity farming	Bamboo Crafts training	8 days (1 programme)	Bamboo and other forest root articles preparation
Apiculture	Honey production and value addition	Importance of bee keeping, Types of honey bee sps, e and value addition	02 (5 days)	Handling of honeybees and observations on bee activity, processing of honey
Processing	PHT	Processing and Value addition to horticultural crop produces	01 (07days)	Processing of fruits, Vegetables and spices

6.5. Plan for sponsored training programme during 2011-12

Crop/ Enterprise	Identified Thrust Area	Organization	Training course title*	No. of Courses	Sponsoring Agency	Skill to be transferred
Om soil testing kit	Soil Fertility Management	Farmers Clubs	Testing of Organic matter and pH by Om kit	2	NABARD	Soil Testing by Om kit
Aonla	Production technology and nutritional importance	National aonla campaign mission	Production technologies for aonla and its importance in health	02	National aonla campaign mission	Production technology and nutritional importance
Banana	Production technology	NABARD	Innovative techniques in banana production	03	NABARD	High density planting, Low cost staking, Innovative watering device, prolinage technique
Arecanut	Drainage management	Farmers Clubs	Use of Ground water level measuring device in arecanut for drainage management	01	NABARD	Measuring ground water level, Designing drains
Vermicomposting	Composting	SHGs		01	Varsha Agencies, Chitradurga	Composting and shredding of farm wastes

7. Extension programmes planned for 2011-12

Month	Block & village	Extension programme*	Its relation to KVK activities (Tables 3 to 6)**	Expected category of participants	Remarks
1	2	3	4	5	6
Jan	Yellapura-Kiruvatti	Trainings, MD, FV	FLD	PF/FW/RY	
	Sirsi-Hegadekatta	Field day, FV	FLD	PF/FW/RY	
Feb	Yellapura-Kiruvatti	Trainings, FV	FLD	PF/FW/RY	
	Sirsi-Hegadekatta	FV	FLD	PF/FW/RY	
April	Kumta (Vannalli)	Onion field day	FLD	PF/FW/RY/EF	
	Mundagod	Mango field day	OFT	PF/FW/RY/EF	
	Siddapur	Pepper processing field day	FLD	PF/FW/RY/EF	
	Joida-Gunda	Group meetings	FLD	PF/FW/RY	
	Mundagod-Indur	Group meetings	OFT	PF	
	Sirsi-Hegadekatta	Group meetings	FLD	PF/FW/RY	
May	Joida-Gunda	Group meetings, FV	FLD	PF/FW/RY	
	Mundagod-Indur	Group meetings, FV	OFT	PF	
	Sirsi-Hegadekatta	Group meetings, FV	FLD	PF/FW/RY	
June	Joida-Gunda	Trainings, MD, FV	FLD	PF/FW/RY	
	Mundagod-Indur	Trainings, MD, FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, MD, FV	FLD	PF/FW/RY	
July	Joida-Gunda	Trainings, MD, FV	FLD	PF/FW/RY	
	Mundagod-Indur	Trainings, FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, FV	FLD	PF/FW/RY	
Aug	Joida-Gunda	Trainings, FV	FLD	PF/FW/RY	
	Mundagod-Indur	FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, FV	FLD	PF/FW/RY	
Sept	Joida-Gunda	Trainings, FV	FLD	PF/FW/RY	
	Ankola-Belse	Trainings, FV	FLD	PF/FW/RY	
	Mundagod-Indur	Trainings, FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, FV	FLD	PF/FW/RY	
Oct	Joida-Gunda	Trainings, FV, Field day	FLD	PF/FW/RY	

	Ankola-Belse	Trainings, FV, Field day	FLD	PF/FW/RY	
	Mundagod-Indur	Trainings, FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, FV	FLD	PF/FW/RY	
	Banavasi/Kadagodu	Ginger field day	OFT	PF/FW/RY/EF	
	-	Banana field day	FLD	PF/FW/RY/EF	
Nov	Joida-Gunda	Trainings, FV	FLD	PF/FW/RY	
	Ankola-Belse	Trainings, FV	FLD	PF/FW/RY	
	Yellapura-Kiruvatti	FV	FLD	PF/FW/RY	
	Mundagod-Indur	Trainings, FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, FV	FLD	PF/FW/RY	
Dec	Yellapura-Kiruvatti	Group meetings, FV	FLD	PF/FW/RY	
	Mundagod-Indur	Trainings, FV	OFT	PF	
	Sirsi-Hegadekatta	Trainings, FV	FLD	PF/FW/RY	

8. Details of print & electronic media coverage planned for 2011-12

Sl. No.	Nature of literature/publications and no. of copies	Proposed title of the publication
1	Booklet	Summer onion production technologies
		Pine apple
	Book	Spices and value addition
	Booklet - 200	Om soil testing kit in Kannada and English
	Broucher - 2000	Om soil testing kit in Kannada
	Booklet	Good Agriculture Practices in Black Pepper
	Broucher	Drainage management in Arecanut
Sl. No.	Nature of media coverage	Proposed title of the programme to be telecasted/ broadcast
1	AIR, Karwar	Scientific cocoa cultivation as inter crop in arecanut based inter cropping system
		Innovative techniques in banana production
		Scientific production of pine apple
	Radio	Organic Farming
		Soil Fertility management in high rainfall areas
	TV	Soil organic matter and Soil pH testing by Om kit
	News Paper / Journals - Popular article	Second Green revolution
	AIR, Karwar	Drainage management in Arecanut
	AIR, Karwar	IDM in Black pepper

9. Nature of collaborative activities planned for 2011-12

Thrust area	Collaborative Organizations	Nature of activities*	No. of Activities
Soil Fertili\zer Management	**KSDA**	**Campaigns**	**10**
Drainage management in Arecanut	NABARD	Training and Demonstrations	2

10. Financial status of revolving fund and plan for its utilization

Opening balance as on 01.04.2010 (Rs.in Lakh)	Expenditure incurred during 2010-11 (Rs.in Lakh)	Receipts during -2010-11 (Rs.in Lakh)	Closing balance as on 31.01.2011 (Rs.in Lakh)	Proposed expenditure during 2011-12 (Rs.in Lakh)	Purpose	Expected production (Tonnes / Lakh Nmbers/)	Proposed receipts during 2011-12 (Rs.in Lakh)
247597	136658	174021	2849601	126000			1,89,000

11. Physical status of revolving fund and plan for its utilization

Opening stock position of materials* as on 01.04.2010 (Tonnes / Lakh Nmbers/)		Quantity produced during 2010-11 (Tonnes / Lakh Nmbers/)	Quantity sold during 2010-11 (Tonnes / Lakh Nmbers/)	Closing stock position as on 31.01.2011 (Tonnes / Lakh Nmbers/)	Expected production during 2011-12 (Tonnes / Lakh Nmbers/)	Expected number of farmers to be benefited
Vegetable kits	0	124	124	0	25	25
Taqua metere	0	0	0	0	225	225
Bio-digester	0	126	126	0	50	50
Bajra legume mixture	0	206	206	0	100	100
Om Soil Testing Kit	0	25	25	0	50	500
Paddy	0	32 q	0	32q	35q	
Horticulture seedlings	0	500	500	0	250	
Sapota	0	400 kg	400 kg	0	350 kg	
Cashew	0	300 kg	300 kg	0	275kg	
IBA rooting harmone	0	2 kg	0	2kg	2 kg	200
Velvet bean	15 kg	0	0	15 kg	20 kg	25

12. 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 Qtl	Value Rs.
I	2.0 acre	Rainfed	Kharif	Paddy(Abhilash)	2.0 acre	35.00	35000.00
			Rabi/summer	Sun hemp	1.0 acre	5.00	8500.00
II	2.0 acre	Rainfed	Karif/ Rabi/ Summer	1. Sapota	0.75 acre	4.00	4000.00
				2. Cashew	1.25 acre	3.00	10000.00
				3. Velvet bean	-	0.20	700.00
				4. Pepper rooted cuttings	-	500 Nos	5000.00
				5. Rooting hormone	-	2kg	2000.00
						Total:	**65200.00**

13. 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	Black pepper seedlings	Scientist- Farmer - NABARD	2000

14. 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 2011-12. Please give details.

Sl. No	Name of activity	Extent of coverage	
		No. of farmers	Area (ha)

***individual/SHGs/farmers' associations/corporate/institutions/private agencies etc**

15. National Horticulture Mission (NHM) is being implemented through out the country. You are requested 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 2011-12

Sl. No	Name of activity	Crops	Extent of coverage	
			No. of farmers	Area (ha)
1	Training on predisposing factors of diseases of plantation crops and their management	Arecanut, Black pepper, Coconuut, Pineapple, ginger	500	200
2	Scientific method of Bordeaux mixture preparation (demonstrations)	Arecanut, coconut, Banana, Black pepper	350	100
3	Integrated management of diseases of plantation crops	Arecanut, Black pepper, Cardomon, Coconuut, Pineapple, ginger, Cashew, Mango	400	100
4	Training cum demonstrations on seed bed preparation/seed treatment/IPM of onion in coastal parts of Uttar kananda districts.	Onion	80	200

16. Whether SREP under ATMA is prepared and implemented functioning in your district? YES

If yes, what type of coordination and collaboration does your KVK is proposed to have during 2011-12?

Sl. No	Name of activity / Programes	No. of programmes	Crops / Enterprise	Extent of coverage*	
				No. of farmers	Area (ha)
	Trainings & Demonstrations	6	Arecanut, Paddy, Ginger, Banana	200	150

17. What type of scientist-Farmer linkages are proposed by your KVK for 2010-11?

18. 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	15.00	300	25	05	

19. Details of budget utilization (2010-11) upto February 2011

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	350000	350000	3544381
2	**Traveling allowances**	100000	100000	54137
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	180000	180000	123590
B	POL, repair of vehicles, tractor and equipments	14000	14000	106938
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	75000	75000	65338
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	35000	35000	23069
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	175000	175000	114936
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	80000	80000	13217
G	Training of extension functionaries	25000	25000	3226
H	Maintenance of buildings	30000	30000	30000
I	FFS	25000	25000	-
J	Library	5000	5000	2447
TOTAL (A)		**4400000**	**4400000**	**4081279**
B. Non-Recurring Contingencies				
1	**Works- administrative building**	3600000	3600000	-
2	**Two demo units**	800000	800000	-
3	**Equipments: Tractor : 500000** **Power tiller : 150000 Generator : 100000**	750000	750000	237900
4	**Library** (Purchase of assets like books & journals)	10000	10000	-
TOTAL (B)		**5160000**	**5160000**	**237900**
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		**9560000**	**9560000**	**4319179**

20. Details of Budget Estimate (2011-12) –

S. No.	Particulars	BE		
A. Recurring Contingencies				
1	**Pay & Allowances**	5300000		
2	**Traveling allowances**	150000		
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	250000		
B	POL, repair of vehicles, tractor and equipments	200000		
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1,25,000		
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	100000		
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2,77,100		
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	56,405.00		
G	Training of extension functionaries	50000		
H	Maintenance of buildings	15000		
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library	15000		
TOTAL (A)		**65,28,505.00**		
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**65,28,505.00**		

21. Targets for E-linkage activities for 2011-12

S. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
01	Creation of web-site	Completed	
02	Title of the technology module to be prepared		
03	Creation and maintenance of relevant database system for KVK		
04	Any other (Please specify)		

22. Activities planned under Rainwater Harvesting Scheme during 2011-12 (only to those KVKs which are already having scheme under Rain Water Harvesting)

S. No	Activities planned during 2011-12	Remarks if any

23. Publication of success story / case study planned for 2011-12

S. No	Title of success stories	Proposed date for finalization of documentation*	Title of the case study*	Proposed date for finalization of documentation*
01	**Documentation of innovative farmer / farm women**	**November 2011**	**Case study of successful SHGs**	**November 2011**

24. Technology Week

Particulars	Details
Period of Technology Week Observed during 2010-11	July 2010
Period of Technology Week planned during 2011-12	October 3rd week
No. of demonstrations planned to be conducted in KVK Campus to show to the farmers during Technology Week	15
Other activities / Programmes planned in connection with Technology Week	Trainings , Exhibitions, Ghoshti, Innovations

25. Innovative Farmer's Meet

Particulars	Details
Are you planning for conducing Farm Innovators meet in your district?	Yes
If Yes likely month of the meet	November 2011
Brief action plan in this regard	1. Advertisements for inviting potential innovators 2. Calling a meeting of innovators 3. Documentation of innovations 4. Selection of potential innovations for testing 5. Arranging interaction with the innovators 6. Promoting useful innovations for further development and testing

26. Progressive Farmers List

Particulars	**Details**
Number of Progressive Farmers address and all details planned to be collected and documented during 2011-12*	100
Likely Date and Month of completion of this work (on or before 30th June 2011)	

**Fresh collection and documentation need to be done during 2011-12*

27. Farmer's Field School planned during 2011-12

S. No	**Thematic area**	**Title of the FFS**	**Budget proposed in Rs.**
1	**Pest management**	**IPM in Paddy**	**25000**

28. Please give details of activities planned, other than those listed above.
Integrated Farming System

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