# PROFORMA FOR ACTION PLAN OF KVKS IN ZONE VIII 2008-09

# **I. GENERAL INFORMATION**

1.	Name and address of KVK with Phone, Fax, e-mail and web address	Taralabalu Krishi Vigyan Kendra
1.	Traine and address of KVK with I holle, Fax, e-mail and web address	Kesarivana, Tholahunase
		DAVANAGERE-577002
		Karnataka
		E-Mail: tkvk@taralabalu.org / dvgtkvk@yahoo.com
2.	Name and address of host organization with Phone, Fax and e-mail	Taralabalu Rural Development Foundation
		SIRIGERE-577541
		Dist.: Chitradurga
		Phone: 08194 – 268829, 268842
		Fax: 08194 – 268847
		E – mail: trdf@taralabalu.org
3.	Name of the Programme Coordinator	Dr.T.N.Devaraja
	Residence Phone Number/ Mobile No.	Mob.: 9448252673
4.	Year of sanction	2004
5.	Major farming systems / enterprises	Maize, Sugarcane, Paddy, Ragi, Groundnut, Sunflower,
		Bengalgram, Cotton, Jowar, Vegetable crops, Banana,
		Mango, Arecanut, Coconut, Beetle Vine, Dairy, Poultry,
		Fisheries and Sericulture
6.	Name of agro-climatic zone	Zone – III, IV, VII
•	Tume of ugro emiliare zone	Zone III, IV, VII
		Harapanahalli – Zone- III
		Davanagere, Harihar and Jagalur - Zone- IV
		Channagiri and Honnali – Zone-VII
7.	Soil type	Medium to deep black soils and Red sandy loam soil
8.	Annual rainfall (mm)	646 mm

9. Staff Strength:

Details	Programme Coordinator	Subject Matter Specialists	Programme Assistants	Administrative Staff	Drivers	Supporting Staff	Total
Sanctioned	1	6	3	2	2	2	16
Filled	1	3	1	2	2	2	11

# 9a. Details of staff:

Sl.No.	Sanctioned post	Designation	Pay scale	Joining date	Per. / Temp.	SC/ST/Physically Handicapped	Source of salary ( KVK/HO)
	Programme Coordinator						
1.	Dr.T.N.Devaraja	Programme Coordinator	12000-420-18300	17-05-05	Per.	Gen.	KVK
	<b>Subject Matter Specialists Posts :</b>						
2.	Mr.B.O.Mallikarjuna	Agronomy	8000-275-13500	09-01-08	Per.	Gen.	KVK
3.	Mr.Basavanagowda M.G.	Horticulture	8000-275-13500	21-11-06	Per.	Gen.	KVK
4.	Dr.G.K.Jayadevappa	Animal Science	8000-275-13500	29-01-08	Per.	Gen.	KVK
	Programme Assistants Posts :						
5	Miss. Kavitha P.	Home Science	5500-175-9000	01-06-05	Per.	Gen.	KVK
	Administrative Posts :						
6	Mr.Mallikarjuna S. Gudihindala	Office Superintendent -Cum-Accountant	5500-175-9000	01-06-05	Per.	OBC.	KVK
7	Mrs.Mamatha H.Melmalagi	Stenographer -Cum-Computer Operator	4000-100-6000	26-06-05	Per.	Gen.	KVK
	<b>Supporting Posts:</b>						
8	Mr.B. Shivakumar	Office Attendant	2550-55-2660-60-3200	01-06-05	Per.	Gen.	KVK
9	Mr.S.E. Shivakumar	Farm Attendant	2550-55-2660-60-3200	01-06-05	Per.	Gen.	KVK
10	Mr.N.M.Marulasiddaiah	Driver-Cum-Mechanic	3050-75-3950-80-4950	01-06-05	Per.	Gen.	KVK
11	Mr.S. Shivakumar	Driver-Cum-Mechanic	3050-75-3950-80-4950	01-06-05	Per.	Gen.	KVK

# 10. Plan of Human Resource Development of KVK personnel during 2008-09

Sl.	Discipline	Area of training required	Institution where training is offered	Approximate duration (days)
No.				
1	Agronomy	Hybrid Rice Seed production	DRR, Hyderabad	10
2	Agronomy	Recent advances in oil seed production	DOR, Hyderabad	10
3	Animal Science	Recent advances in animal nutrition	NIANP, Bangalore	05
4	Horticulture	Production of quality planting material	IIHR, Bangalore	06
		for Horticultural crops		
5	Horticulture	Post Harvest Technologies in	IIHR, Bangalore	06
		Horticulture crops		
6	Agronomy	Recent advances in training	NAARM, Hyderabad	09
		management		
7	Computer programmer	Web designing, Database management	Computer technology, Davanagere	90 (1 hour/day)
8	Superintendent	Inventory (Store) System	Tally Academy	90 (1 hour/day)
9	Steno-Cum-Comp. Operator	Inventory (Store) System	Tally Academy	90 (1 hour/day)
10	Home Science	Recent advances in food processing,	UAS, Bangalore	10
		value addition and post harvest		
		technology		
11	Fisheries	Recent advances in aquaculture	CIFA, Bhuvaneshwar	15
		technology		

## 11. Infrastructure:

# i) Total Area (ha) with KVK along with Survey Numbers:

Area Cultivated	Area occupied by buildings and roads	Area with demonstration units (Dairy & Seri.)
15.50 Acres	1.12 Acres	1.83 Guntas

## ii) Buildings

A	Admn. Building			Farmer's Hostel		Staff Quarters			<b>Details of Demonstration Units</b>		
Plinth	Cost	Year of	Plinth	Cost	Year of	Plinth	Cost	Year of	Name	Plinth area	Cost (Rs. in
area	(Rs. in	Construction	area	(Rs. in	Construction	area	(Rs. in	Construction		(SQM)	lakh)
(SQM)	lakh)		(SQM)	lakh)		(SQM)	lakh)				
550	47.55	2007-08	300	21.24	2007-08	392	28.61	2007-08	Dairy	79.30	2.25
									Sericulture	79.30	3.16

## iii) Vehicles

Type of vehicle	Model	Actual cost (Rs.)	Total kms. Run	Present status
Tempo Cruiser	2005	4,99,250/-	45,790	Good
Hero Honda CD Deluxe	2006	39,298/-	14,470	Good

# iv) Equipments and AV aids

Sl. No.	Name of Equipments	Date of purchase	Cost (Rs.in lakh)	Present status
1	Tractor & Trailer	2005	4,99,995/-	Good
2	Xerox Machine	2006	73,840/-	Good
3	Digital Camera	2006	19,900/-	Good
4	Over Head Projector	2006	19,935/-	Good
5	TV with DVD Player (Funded by: SHIMUL)	2006	11,350/-	Good
6	Power tiller (Funded by cotton FLD)	2008	99,400/-	Good

# 12. Details of SAC meeting conducted during 2007-08 and proposed during 2008-09

Sl. No						
	Conducted during 2007-08	Proposed for 2008-09				
1	Fourth SAC meeting was conducted on 4 <sup>th</sup> March 2008 and the following					
	recommendations were made.	-1				
		Fifth SAC meeting is fixed on 22 <sup>nd</sup> October 2008				
	• Subject Matter Specialist (Horticulture) should be deputed to KVK					
	Coimbatore/Salem to collect the details on Nutritional tonic and bring the same					
	for testing here.					
	• Write a project proposal for establishment of Vermicompost Units (Vermi					
	Hatcheries) and submit to the Directorate of Bio-Fertilizer Bangalore.					
	• KVK staff to help farmers in adopting 'Precision Farming'. Create Precision					
	Farming Association and try to export the produce.					
	• To start Farmers Field School (FFS) which is a role model for scientist and					
	farmers interaction.					
	• To submit a project proposal on Bio-fertilizer production through the Department					
	of Horticulture for subsidy. (Rs. 25.0 lakh fund is available for "Plant Health					
	Clinic and Disease Forecast Unit establishment".)					
	• To use the Animal Husbandry demo units properly and asked the SMS (Animal					
	Science) and SMS (Horticulture) to visit Namakkal KVK (TANUVAS) for					
	studying the various activities particularly about the demonstration units					
	established there which are being maintained from revolving fund. Namakkal					
	KVK is generating lot of income from Animal Husbandry units and the same can					
	be replicated here.					
	• Asked KVK scientists to attend ZARS meetings to collect latest information on					
	technologies.					
	• Involve the ARS Scientists Kathalagere for demonstrations of KVKs related to					
	Coconut Black Headed Caterpillar (CBHC).					
	• Encourage integrated farming system and KVK should work in this direction.					
	• Use coconut waste for Vermicomposting. Coconut husk/fiber contains Lignin					
	which needs to be degraded. KVK, Kasaragod has developed earthworm species					
	for degrading Lignin. Bring this earthworm species, multiply and distribute					
	among farmers. SMS (Agronomy) should take initiation in this regard.					

# II. PLAN FOR TECHNICAL ACTIVITIES

## 1: OPERATIONAL AREA DETAILS FOR 2008-09

Sl. No.	Taluk	Name of villages	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
1	2	3	4	5	6
1	Jagalur	Chikkabantanahalli	Onion	- Low productivity due to use of Local	- Popularization of HYV Arka
		cluster		Variety(Jagalur local)	kalyan
		(Chikkabantanahalli,	Dry land	- Low water availability	- Promotion of fruit crops/ vegetable
		Hoskere, Sokke,	Horticulture	- Major area in rainfed	crops/ flower crops
		Kechenahalli)	Ragi	- Low yield	- High yield varieties
				- Local varieties	- Seed treatment
				- No bio-fertilizer	- Micro nutrient application
				- No micro nutrient application	- Value added products of Ragi
				- No value addition	
			Navane	- Low yield	- Improved varieties
				- Local varieties	- Seed treatment
				- No recommended dose of fertilizer	- Recommended dose of fertilizer
				- No micro nutrient application	- Value added products of Navane
				- No value addition	
			Livestock	- Low milk production / low quality milk production	- Feeding and breeding
			rearing	- Infertility problems in cattle	- Disease control
				- Foot and mouth disease and mastitis	
2	Harapanahalli	Budihal Cluster	Livestock	- Low milk production / low quality milk production	- Feeding and breeding
		(Budihal, Anajigere,	rearing	- Infertility problems in cattle	- Disease control
		Nandikamba,		- Foot and mouth disease and mastitis	
		Kallahalli			
		Nandibevur)			

1	2	3	4	5	6
	Harapanahalli	Budihal Cluster	Cotton	- No RDF	- Bt Cotton
	_	(Budihal, Anajigere,		- Sucking pest	- Seed treatment
		Nandikamba,		- Boll worms	- Growth regulators
		Kallahalli		- Leaf reddening and square drying	- Micronutrient and RDF
		Nandibevur)			- Integrated Pest Management (IPM)
			Sunflower (Rabi)	- Genuine seeds	- Authenticated seeds
				- Bud necrosis and BHC	- IPM
				- No Micronutrients (Zinc and Boron)	- Micro nutrient spray
				- Close Spacing	- Recommended spacing
			Dry land	- Low water availability	- Promotion of fruit crops/ vegetable
			Horticulture	- Major area in rain fed	crops/ flower crops
3	Channagiri	Hodigere Cluster	Livestock rearing	- Low milk production / low quality milk production	- Feeding and breeding
		(Hodigere,		- Infertility problems in cattle	- Disease control
		Koretegere,		- Foot and mouth disease and mastitis	
		Bommenahalli,	Arecanut	- Button shedding	- Integrated Nutrient Management
		Neethigere,		- Lower productivity due to improper nutrient	- Method of application of fertilizers.
		Devarahalli,		management	
		Marabanahalli,	Banana	- Lower bunch weight due to improper nutrient	- Integrated Crop Management in
		Basavapattana		management	Banana
		Daginakatte Garaga)		- Psuedostem weevil damage	- Stem injection
			Ragi	- Low yield	- High yield varieties
				- Local varieties	- Seed treatment
				- No bio-fertilizer	- Micro nutrient application
				- No micro nutrient application	
			Maize	- No Potash application	- Integrated Nutrient Management
				- No micronutrient application	(INM)
				- Stem borer	- Zinc application
				- Downey mildew	- Resistant variety/ hybrid
			Paddy	- Improper nutrient management	- INM
				- No knowledge on seed treatment	- Seed treatment
				- BPH and blight	- IPM
				- Planting of aged seedlings	

1	2	3	4	5	6
		Hodigere Cluster	Cotton	- No RDF	- Bt Cotton
	Channagiri	(Hodigere,		- Sucking pest	- Seed treatment
		Koretegere,		- Boll worms	- Growth regulators
		Bommenahalli,		- Leaf reddening and square drying	- Micronutrient and RDF
		Neethigere,			- Integrated Pest Management (IPM)
		Devarahalli,	Bengalgram	- Poor yield	- High Yielding Variety (HYV)
		Marabanahalli,	(Rabi)	- Poor knowledge on seed treatment	- Seed treatment
		Basavapattana		- Wilt and pod borer	- IPM
		Daginakatte Garaga)		- Shriveled seeds	- Scientific storage of pulses
				- Loss of grains due to storage pests	
			Redgram	- Low yield	- HYV
				- Poor knowledge on use of bio fertilizers	- Seed treatment
				- Pod borer	- IPM
				- Loss of grains due to storage pests	- Scientific storage of pulses
			Groundnut	- Continuous use of local variety	- HY and resistant variety
			(Kharif)	- Collar rot, root rot and wilting	- Seed treatment
				- Tikka	- Chemical control
				- No gypsum application	- Gypsum application
				- More energy, labour and time consumption for	- Groundnut stripper and decorticator
				stripping and shelling	
			Sunflower	- Genuine seeds	- Authenticated seeds
			(Kharif)	- Bud necrosis and BHC	- IPM
				- No Micronutrients (Zinc and Boron)	- Micro nutrient spray
				- Close Spacing	- Recommended spacing
			Tank fisheries	- Low fish production per unit area (0.5 to 0.8 t per	- Sustainable integrated fish farming
				ha)	with polyculture
				- Incomplete technical know-how of aquaculture	
				technology	
		TZ 1 1 01	T 1	- Lower income per unit area	F 11 11 11
4.	Davanagere	Kandagal Cluster	Livestock	- Low milk production / low quality milk production	- Feeding and breeding
		(Kandagal, Bada,	Rearing	- Infertility problems in cattle	- Disease control
		Mallenahalli,		- Foot and mouth disease and mastitis	
		Ramagondanahalli)			

1	2	3	4	5	6
	Davanagere	Kandagal Cluster	Maize	- No Potash application	- Integrated Nutrient Management
		(Kandagal, Bada,		- No micronutrient application	(INM)
		Mallenahalli,		- Stem borer	- Zn application
		Ramagondanahalli)		- Downey mildew	- Resistant variety/ hybrid
			Paddy	- Improper nutrient management	- INM
				- No knowledge on seed treatment	- Seed treatment
				- BPH and blight	- IPM
				- Planting of aged seedlings	
			Sugarcane	- Low yield	- Resistant variety
				- Woolly aphid	
			Soybean	- Mono cropping	- Crop rotation
				- Poor soil fertility	- Pulse crop
				- No value addition	- Importance of soybean and value
					added products
			Tank fisheries	- Low fish production per unit area (0.5 to 0.8 t per	- Sustainable integrated fish farming
				ha)	with polyculture
				- Incomplete technical know-how of aquaculture	
				technology	
				- Lower income per unit area	
			Groundnut	- Continuous use of local variety	- HY and resistant variety
			(Rabi)	- Collar rot, root rot and wilting	- Seed treatment
				- Tikka	- Chemical control
				- No gypsum application	- Gypsum application
				- More energy, labour and time consumption for	- Groundnut stripper and decorticator
				stripping and shelling	
			Sunflower	- Genuine seeds	- Authenticated seeds
			(Kharif)	- Bud necrosis and BHC	- IPM
				- No Micronutrients (Zinc and Boron)	- Micro nutrient spray
				- Close Spacing	- Recommended spacing
			Drudgery	- Energy labour and time consumption	- Use of Drudgery reducing
			reducing		implements in ragi, maize, sunflower,
			equipments		Paddy, groundnut and vegetables

1	2	3	4	5	6
	Davanagere	Kandagal Cluster (Kandagal, Bada, Mallenahalli, Ramagondanahalli)	Nutrition education	- Malnutrition among preschoolers and anemia among adolescent girls	<ul> <li>Importance nutritious foods for preschoolers and preparation of low cost nutritious mixes</li> <li>Importance of Iron and other nutrients during adolescent period</li> </ul>
			Mushroom cultivation	<ul><li>Non availability of good quality seed</li><li>Crude method of mushroom cultivation</li></ul>	- Scientific method of production and processing of Oyster mushroom
			Coconut	<ul><li>Higher incidence of BHC and Mites.</li><li>Lower productivity</li></ul>	<ul> <li>Integrated Crop Management in Coconut</li> <li>Root feeding with Monocrotophos</li> <li>Release of parasite (Goniozus nephentidis)</li> </ul>
			Medicinal and Aromatic crops	- Production in few acres	- Popularization of important Medicinal and Aromatic crops.
5.	Harihara	Jigali Cluster (Jigali, K.N. Halli, Devarabelekere,	Livestock rearing	<ul> <li>Low milk production / low quality milk production</li> <li>Infertility problems in cattle</li> <li>Foot and mouth disease and mastitis</li> </ul>	<ul><li>Feeding and breeding</li><li>Disease control</li></ul>
		J. Kumblur)	Coconut	<ul><li>Higher incidence of BHC and Mites.</li><li>Lower productivity</li></ul>	<ul> <li>Integrated Crop Management in Coconut</li> <li>Root feeding with Monocrotophos</li> <li>Release of parasite (Goniozus phentidis)</li> </ul>
			Tank fisheries	<ul> <li>Low fish production per unit area (0.5 to 0.8 t per ha)</li> <li>Incomplete technical know-how of aquaculture technology</li> <li>Lower income per unit area</li> </ul>	- Sustainable integrated fish farming with polyculture

#### SUMMARY OF LIST OF THRUST AREAS FOR THE KVK FOR 2008-09

- Integrated nutrient management in maize, minor millets, paddy, sunflower and groundnut
- Recycling of crop waste for vermicomposting
- Integrated pests management in paddy, groundnut, sunflower, cotton, bengalgram and redgram
- Popularization of high yielding variety/ hybrids in cereals and oil seeds
- Livestock nutrition
- Breeding problems in cattle
- Quality clean milk production
- Disease control in livestock
- Sustainable integrated fish farming with polyculture
- Enrichment and value addition to cereals, pulses, fruits and vegetables for nutritional security and income generating activities
- Drudgery reduction in farm and house hold level for farm women
- Family nutrition management
- Technology support and income generating activities for women SHG members
- Integrated Nutrient Management in Coconut, Arecanut and Banana
- Black headed caterpillar and mites management in Coconut

# 2. Abstract of interventions proposed based on the prioritized problems during 2008-09

					Interventions		
S.No	Crop/Enterprise	Prioritized Problem	Title of OFT	Title of FLD	Title of Training	Title of Training for extension personnel	Others
1	2	3	4	5	6	7	8
1.	Maize	<ul> <li>No micronutrient application</li> <li>No potash application</li> <li>Stem borer</li> </ul>	Integrated nutrient management	Popularization of NAH- 2049	<ul> <li>Improved         cultivation         practices</li> <li>Soil fertility and         nutrient         management</li> <li>Vermicompost         production</li> <li>Demonstration of         maize sheller</li> <li>Value added         products in maize</li> </ul>	products in maize	Grama sabhas, Field visits Field day
2.	Paddy	<ul><li>Improper nutrient management</li><li>BPH and blight</li></ul>		Introduction of HYV (TANU KMP-101)	- Nursery management - INM - Role of pheromone traps for management of stem borer	- Recent advances in Paddy cultivation	Seminar Field day
3.	Minor millets (Ragi and Navane)	<ul> <li>Low yield</li> <li>Local varieties</li> <li>No bio-fertilizer</li> <li>No micro nutrient application</li> <li>No recommended dose of fertilizer</li> </ul>		Introduction and popularization of HYV Ragi (GPU- 28) and Navane (RS-118)	- Fertilizer management - Seed treatment with bio fertilizers - Value addition in ragi and navane	- Value addition in ragi and navane	Field day

1	2	3	4	5	6	7	8
4.	Groundnut (Kharif/rabi)	<ul> <li>Collar rot, root rot and wilting</li> <li>Tikka</li> <li>No gypsum application</li> <li>More energy, labour and time consumption for stripping and shelling</li> </ul>		Popularization of resistant variety GPBD-4	<ul><li>Seed treatment</li><li>INM</li><li>Importance of gypsum</li></ul>	<ul><li>Improved cultivation practices</li><li>Seed production techniques</li></ul>	Field day, TV shows Agri camps
5.	Sunflower (Kharif/Rabi)	<ul> <li>Lack of genuine seeds</li> <li>Bud necrosis and BHC</li> <li>No micronutrients (Zinc and Boron)</li> <li>Close spacing</li> </ul>		Integrated Crop Management KBSH-53	- Improved cultivation methods - Use of micronutrient spray - Role of beneficial insects for seed setting	Recent advances in production technology	Field day, TV shows
6.	Bengalgram	<ul><li>Poor yield</li><li>Poor knowledge on seed treatment</li><li>Wilt and pod borer</li><li>Shriveled seeds</li></ul>	-	- Introduction of wilt and drought tolerant variety (JJ – 11)	<ul> <li>Seed treatment and fertilizer management</li> <li>Role of pheromone traps in management of pod borer</li> </ul>	Integrated crop management	TV shows, Field days
7.	Red gram	<ul><li>Low yield</li><li>Poor knowledge on use of bio fertilizers</li><li>Pod borer</li></ul>		- Introduction of HYV BRG-2 for late Kharif	- Production technology - Importance of short duration varieties - Installation of the pheromone traps - IPM	- Recent advances in IPM technology	Field day

1	2	3	4	5	6	7	8
8.	Soybean	<ul><li> Mono cropping</li><li> Poor soil fertility</li><li> No value addition</li></ul>		Introduction of Monetta and KB-79	- Cultivation practices - Importance of intercrop in Sugarcane - Crop rotation and soil health management	Soil fertility and crop rotation	Field day
9.	Cotton	<ul><li>No RDF</li><li>Sucking pest</li><li>Boll worms</li><li>Leaf reddening and square drying</li></ul>		Integrated Crop Management in Bt (MRC-6918)	<ul> <li>Importance of Bt cotton</li> <li>Management of pest through pheromone traps</li> <li>Growth regulators</li> </ul>	Recent advances in production technology	FFS, Field day, TV shows
10.	Sugarcane	- Low yield - Woolly aphid incidence		Popularization of woolly aphid resistant variety COVC- 2003-165	- Production technology - Inter cropping	Production technology	Field day
11.	Coconut	<ul><li>Higher incidence of BHC</li><li>Mites infestation</li><li>Poor nutrition</li></ul>	Assessment of nutritional tonic to strengthen coconut palms	Integrated management of BHC in Coconut	Improved production technology in Coconut	Management of BHC in Coconut	FFS Seminar Workshop Method demonstration
12.	Arecanut	Button shedding     Micronutrient     deficiency		Integrated nutrient management in Arecanut	Improved production technology in Arecanut	Integrated Nutrient Management in Arecanut.	Seminar Workshop Method demonstration
13.	Banana	- Lower productivity - Panama wilt and Pseudo stem weevil incidence		Use of micronutrient spray (Banana special) in Banana	Improved production technology in Banana	Integrated Nutrient Management in Banana	Seminar Workshop Method demonstration

1	2	3	4	5	6	7	8
14.	Onion	<ul> <li>Purple blotch disease</li> <li>Low productivity due to use of local variety</li> <li>(Jagalur local)</li> </ul>		Popularization of HYV Arka Kalyan.	Production technology of Onion	Management of purple blotch disease in Onion.	Seminar Workshop Method demonstration
15.	Dry land Horticulture	<ul><li>Major area in rainfed</li><li>Low water availability</li></ul>			Dry land Horticulture	Dry land Horticulture	Seminar Workshop Exposure visits.
16.	Drudgery reducing implements (Rotary weeder, cycle weeder and twin wheel hoe weeder)	- Energy labour and time consumption	Assessment of drudgery reducing implements		Use of Drudgery reducing implements in ragi, maize, sunflower, paddy, groundnut and vegetables	Demonstration of drudgery reducing implements	Workshop
17.	Ragi malt	Malnutrition among preschoolers	Impact of Ragi malt on physical and mental status of preschoolers		<ul> <li>Importance</li> <li>nutritious foods for</li> <li>preschoolers</li> <li>Preparation of low</li> <li>cost nutritious mixes</li> </ul>	Demonstration of low cost nutritious mixes	
18.	Composite flour mix	Anemia among adolescent girls	Impact of composite flour on health status of adolescent girls		<ul> <li>Importance of Iron and other nutrients during adolescent period</li> <li>Management of balanced diet</li> </ul>	Demonstration of composite flour mixes	
19.	Post harvest technology	-Loss of grains due to storage pests		Safe storage of pulses	- Scientific storage of grains	Scientific storage of grains	

1	2	3	4	5	6	7	8
20.	Mushroom	-Non availability of		Production	- Scientific method	Nutrition	
		good quality seed		technology	of production and	education	
		-Crude method of			processing of Oyster	regarding	
		mushroom cultivation			mushroom	therapeutic and	
					- Nutrition education	nutritional	
					regarding therapeutic	importance of	
					and nutritional	mushroom	
					importance of		
					mushroom		
21.	Fisheries	- Low fish production per		Popularization of	- Sustainable integrated	- Sustainable	Radio talk, TV
		unit area (0.5 to 0.8 t per		pond integrated	fish aquaculture in	integrated fish	programme,
		ha)		aquaculture with	inland ponds	aquaculture in inland	relevant
		- Incomplete technical know-		fish polyculture	- Aquaculture as a	ponds	brochures
		how of aquaculture			profitable	- Fish farm	
		technology			entrepreneurship	management	
		- Lower income per unit area			- Fish seed rearing		
		_			- Fish farm management		

# 3. Details of technology assessment

Sl.No.	Problem identified	Technology for assessment	No. of On Farm Trials
1	Low nutrient status in soil, no integrated approaches	Integrated nutrient management in Maize	05
2	Higher pest incidence in Coconut	Use of TNAU Coconut tonic to strengthen Coconut palms	05
3	Low nitrogen and energy content in the paddy straw	Effect of feeding urea treated paddy straw (Enriched) along with grain mixture on milk production in crossbred milch cows	10
4	Increased cost of production of milk	Use of leguminous fodder crops in ration for reducing the feeding cost in milk production	10
5	Energy labour and time consumption	Assessment of drudgery reducing implements	10
6	Malnutrition among preschoolers	Impact of Ragi malt on physical and mental status of preschoolers	10
7	Anemia among adolescent girls	Impact of composite flour on health status of adolescent girls	10

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT FOR 2008-09

# **MAIZE**

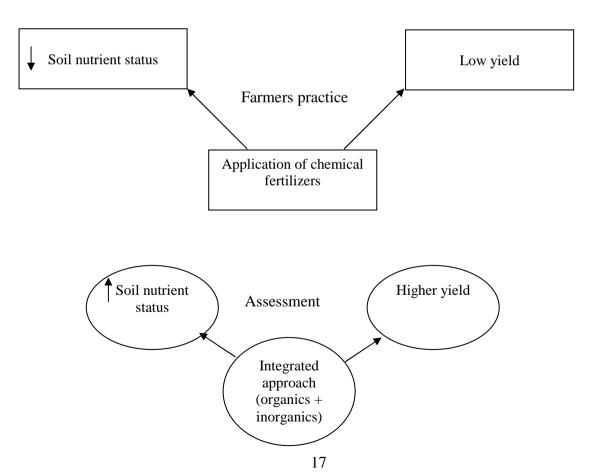
1. Title of the technology to be assessed : Integrated Nutrient Management in Maize

2. Agro-Ecological Zone : Zone IV (Davanagere taluk)

3. Production System : Rainfed

4. Problem definition : No RDF, no integration of organics and inorganic fertilizers, low soil nutrient status leads to low yield.

5. Problem Cause Diagram :



6. Number of farmers and area affected in the operational villages

: 150 farmers and 200 ha area.

7. Rationale for proposing the assessment

: To get the higher yield without affecting the soil nutrient status.

8. Technology options being assessed along with justification

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	50% NP and no Potash application	-	Cost of fertilizer is very high.
2.	Technological Option 1	100% (150 : 75 : 40 NPK kg/ha)	POP, UAS (B)	Higher yields can be obtained
3.	Technological Option 2	75% NPK + 25% N (42 kg) through vermicompost	UAS (B)	Higher yields can be obtained
				without affecting the soil health

9. Parameters to be measured in relation to the technology

- : 1. Soil test before and after.
- 2. Plant height (cm)
- 3. Number of cobs per plant
- 4. Number of seeds/row per cob
- 5. Income per ha

#### 10. Details of farmers

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Eshwarappa	0.4
2.		Mahesha	0.4
3.	Kandagal	Channabasappa B.R.	0.4
4.		Chandrashekar K.G.	0.4
5.		Praveen G.N.	0.4
		2.0	

#### 11. Budget for Assessment

S. No	Crit	Critical inputs for technological options					
5. 140	Name	Qty.	Unit Cost	Total Cost			
1	Seeds	30 kg	Rs.30/kg	900.00			
2	Fetilizers						
	MOP	500 kg	Rs. 500/q	2500.00			
3	Vermicompost	4.2 tons	Rs. 3000/t	12000.00			
	•		Total	15400.00			

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT

## **COCONUT**

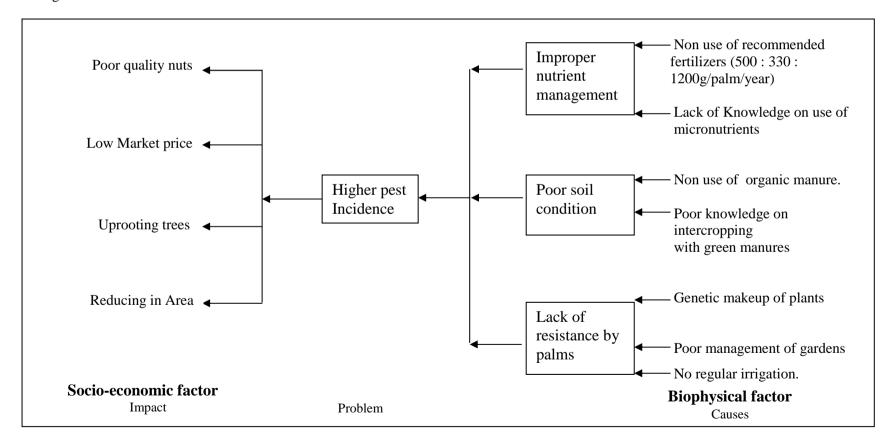
1. Title of the technology to be assessed : Application of TNAU Coconut tonic in Coconut

2. Agro-Ecological Zone : Zone IV (Davanagere and Harihara taluk)

3. Production System : Irrigated

4. Problem definition : Higher pest incidence (*Eriophyid* mite and Black Headed Caterpillar) due to lack of resistance in palms

5. Problem Cause Diagram :



6. Number of farmers and area affected in the operational villages

: 500 farmers and 500 ha area.

7. Rationale for proposing the assessment

: To make Coconut palms healthier by proper nutrition

8. Technology options being assessed along with justification

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice (65 palms)	Application of complex fertilizer (17:17:17) @ 150g/plant.		<ul> <li>Farmers getting 10-15 nuts/bunch.</li> <li>Poor quality nuts</li> <li>Higher pest incidence</li> </ul>
2.	Technological Option 1 (67 palms)	Integrated nutrient management Murate of Potash- 3.5kg/pl Gypsum- 1.0kg/pl Boron-50g/pl Neem cake – 5kg/pl	POP, UAS (D)	<ul> <li>Enriches soil fertility, improves water holding capacity</li> <li>Imparts resistance to plants</li> <li>Helps in getting quality nuts.</li> </ul>
3.	Technological Option 2 ( 68 palms)	Nutritional tonic (200 ml / plant – twice a year at 6 months interval)	TNAU, Coimbatore	Strengthens Coconut palms by supplying micronutrients and growth regulators

9. Parameters to be measured in relation to the technology

- : 1. Number of bunches/palm
- 2. Number of nuts/bunch
- 3. Screening for incidence of pest and diseases

10. Details of farmers

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.	Thurchghatta	Basavarajappa	1.0
2.	Bullapura	T. Basappa	1.0
3.	Jigali	Basavnagowdru	1.0
4.	Jigali	G.M.	1.0
		Jayadevappa	
5.	Jigali	T. Chandrappa	1.0

#### 11. Budget for Assessment

	Critical inputs for technological options					
S. No	Name	Qty.	Unit Cost	Total Cost		
1	Complex fertilizer (17:17:17)	33 kg	8/-	264.00		
2	Murate of Potash	235 kg	6/-	1410.00		
3	Gypsum	67 kg	10/-	670.00		
4	Boron	3.5 kg	75/-	263.00		
5	Neem cake	335 kg	8/-	2680.00		
6	TNAU coconut tonic	8 lit	375/-	3000.00		
Total						

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT

## ENRICHMENT OF FODDER WITH UREA

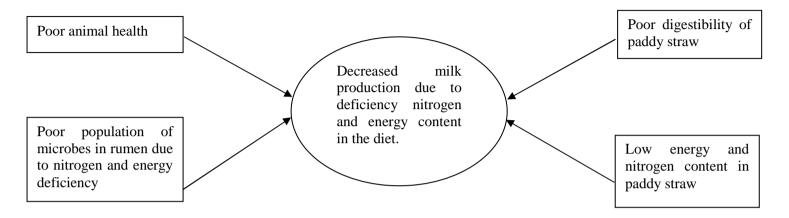
1. Title of the technology to be assessed : Effect of feeding urea treated paddy straw along with grain mixture on milk production in crossbred milch cows.

2. Agro-Ecological Zone : Northern dry zone (Zone-III)

3. Production System : Individual animal rearing by the farmers.

4. Problem definition : Dry roughages especially paddy straw is very low in energy content and does not contain nitrogen. When this straw which is the major feeding stuff is fed to animals, the nutrient availability from the straw will be very low and cause deficiency of both energy and protein in dairy animals there by decreases milk production.

### 5. Problem Cause Diagram



- 6. Number of farmers and area affected in the operational villages Rationale for proposing the assessment
- : Around 80% of the dairy animals owners are affected with this problem.
- : Some of the feeding trials have indicated that whatever energy is available in paddy straw can be better utilized by treating the straw with feed grade urea. Also when grain mixture is fed to animals, the starch (energy) available in the grains helps in microbial protein synthesis there by helps in increasing the straw digestibility. Combination of grain mixture and urea treated paddy straw has not been tried among dairy farmers. In this assessment, the above said combination will be observed for its efficiency in improving the milk yield.

# 7. Technology options being assessed along with justification

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	Feeding only paddy straw along with brans and cakes		Only straw is available for
				feeding animals
2.	Technological Option 1	Feeding 2 kgs urea treated paddy straw along with	NDRI, Kernal	Voluntary intake and
		2kgs of concentrate mixture daily.		digestibility increase.
3.	Technological Option 2	Feeding urea treated paddy straw along with grain	NDRI, Kernal	Voluntary intake and
		mixture (2kg straw and 1kg of grain mixture per day)		digestibility increase.
				Production also increases due
				to the availability of protein
				and energy (grain starch).

- 8. Parameters to be measured in relation to the technology

- : 1. Milk yield.2. Cost of milk production.3. Voluntary intake of paddy straw by the animal4. General health of the animal

## 9. Details of farmers

Sl.No.	Name of Village	Name of Farmer
1.		Thirtharaj
2.		G.M. Prabhakar
3.		Devanna
4.		Lokanna
5.	Hadiaana alustan	Prabhakar K.G.
6.	Hodigere cluster	Meenakshamma
7.		Prakashanna H.G.
8.		Manjanna H.E.
9.		Kuberappa M.G.
10.		Mahadevanna

#### 10. Budget for Assessment

S. No	Critical inputs for technological options				
5. 10	Name	Qty.	Unit Cost	<b>Total Cost</b>	
1	Deworming	1.5 g bolus X 20	Rs.20/ bolus	400.00	
2	Feed grade urea	8 kg/animal X 10	Rs. 5/ kg	400.00	
3	Concentrate feeds	100 kg/animal X 5	Rs 10/ kg	5000.00	
4	Jowar / Maize	60 kg/animal X 5	Rs. 9/ kg	2700.00	
	Total 8500.00				

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT

#### LEGUMINOUS FODDER CROPS IN THE CATTLE RATION

1. Title of the technology to be assessed

: Use of leguminous fodder crops in ration for reducing the feeding cost in milk production

2. Agro-Ecological Zone

: Northern dry zone (Zone-III)

3. Production System

: Mixed farming (Rearing animals along with crop cultivation)

4. Problem definition

: Farmers are not using leguminous fodder crops rich in protein, energy and minerals for animal feeding. They are supplying nitrogen through oil cakes which are very costly and increasing the cost of milk production.

5. Problem Cause Diagram

Lack of awareness Use of costly oil about fodder crops cakes in disproportionate nutritive value Lower milk production manner in dairy animals due to deficiency of protein and increased cost of milk production Non availability of availability of Non leguminous fodder for growing land crops fodder crops.

- 6. Number of farmers and area affected in the operational villages
- 7. Rationale for proposing the assessment

- : Around 90% of the dairy farmers affected with this problem
- : Leguminous fodder crops are rich in crude protein and total digestible nutrients (energy). Farmers are not utilizing the fodder crops which are less costlier when compared to feeding of oil cakes. Also animal health improves by feeding leguminous fodder crops. Therefore, this trial helps farmers in assessing the benefits of using leguminous fodder crops in the ration.
- 8. Technology options being assessed along with justification

Sl.No.	Technological Options	Details of Technology	rce of Technology	Justification
1.	Farmer's Practice	Feeding non leguminous fodder crops and brans and		Feeding animals with non leguminous
		oil cakes		fodder crops as it is available to the
				farmers
2.	Technological Option 1	Feeding non leguminous fodder crops along with		Meeting the energy requirement through
		concentrate feeds as per the nutrient requirement of	NDRI, Kernal	non leguminous fodder crops and crude
		animal (NRC standards) for 2 months		protein through concentrates
3.	Technological Option 2	Feeding leguminous and non leguminous fodder crops		Leguminous fodder crop contains crude
		(1:3 ratio) along with concentrate mixture as per the	NDRI, Kernal	protein helps in reducing the concentrate
		nutrient requirement of animal (NRC standards) for	INDIXI, IXCIIIAI	feeding requirement.
		2months		reeding requirement.

9. Parameters to be measured in relation to the technology

- : 1. Milk yield.
- 2. Cost of milk production.
- 3. Animal health status.

10. Details of farmers

Sl.No.	Name of Village	Name of Farmer
1.		M. Manjunatha
2.		K.B. Rudresh
3.		G.B. Thippeswamy
4.		K.M. Harish
5.	Kandagal	G. S. Channabasappa
6.		Maheshwarappa
7.		K. G. Shankaramurthy
8.		Nandish K.G
9.		C.M. Kallesh
10.		K.M. Nagarajappa

#### 11. Budget for Assessment

S.	Critical inputs for technological options				
No	Name	<b>Total Cost</b>			
1	Deworming	1.5 g bolus X 20	Rs.20/ bolus	400.00	
2	Stylosanthes/ lucerne	3 kg/animal X 5	Rs. 150/ kg	2250.00	
3	Concentrate feeds	100 kg/animal X 5	Rs 10/ kg	5000.00	
4	Mineral mixture	2 kg/animal X 5	Rs. 70/ kg	700.00	
	Total 8350.00				

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT

#### DRUDGERY REDUCING IMPLEMENTS

1. Title of the technology to be assessed : Assessment of weeders as drudgery reducing implements in maize, ragi, sugarcane and pulses

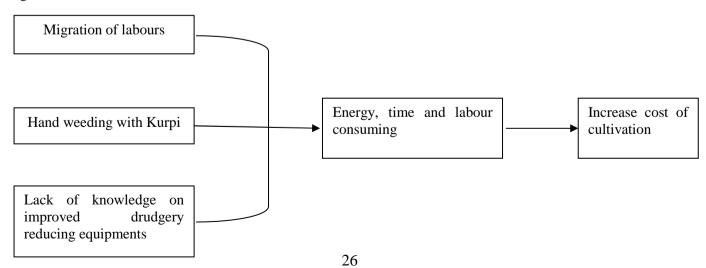
2. Agro-Ecological Zone : Zone IV (Davanagere)

3. Production System :

4. Problem definition : Weeding in field crops is energy, time and labour consuming in turn increase cost of

cultivation

5. Problem Cause Diagram



6. Number of farmers and area affected in the operational villages

: 125 farm women in two villages

7. Rationale for proposing the assessment

: Use of weeders reduces the drudgery, time and labour consumption in turn reduces the cost of cultivation

## 8. Technology options being assessed along with justification

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	Hand weeding (Kurpi)		Poor knowledge on improved drudgery reducing equipments
2.	Technological Option 1	Rotary weeder	PHT, UAS (B)	Less time, energy and
3.	Technological Option 2	Cycle weeder	PHT, UAS (B)	labour consuming
4.	Technological Option 3	Twin wheel hoe weeder	PHT, UAS (B)	Reduce cost on weeding

9. Parameters to be measured in relation to the technology

- : 1. Time consumed for weeding per acre
- 2. Weed biomass per sq.m.
- 2. No. of labours required for weeding per acre
- 3. Cost of cultivation per acre

#### 10. Details of farmers

Sl.No.	Name of Village	Name of Farm women	Unit (No.)
1.	Mallenahalli	Mamatha	
2.		Kavitha	
3.		Savithramma	3 weeders to group
4.		Kamalamma	
5.		Suvarnamma	
6.	Kandgal	Devika	
7.		Gangamma	
8.		Kavitha Veeraiah	3 weeders to group
9.		Yashoda	
10.		Sakamma	

#### 11. Budget for Assessment

S. No	Critical inputs for technological options				
5.110	Name	Qty.	Unit Cost	<b>Total Cost</b>	
1	Rotary weeder	2	850.00	1700.00	
2	Twin wheel hoe weeder	2	850.00	1700.00	
3	Cycle weeder	2	1800.00	3600.00	
			Total	7000.00	

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT

# **VALUE ADDED PRODUCT IN RAGI (MALT)**

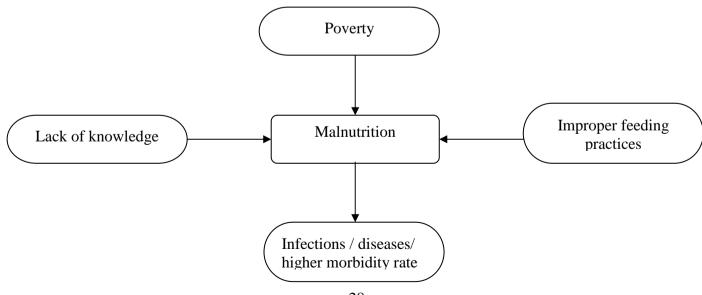
1. Title of the technology to be assessed : Impact of Ragi malt on physical and mental status of preschoolers

2. Agro-Ecological Zone : Zone IV (Davanagere)

3. Production System

4. Problem definition : Prevalence of malnutrition among preschool children

5. Problem Cause Diagram



6. Number of preschoolers suffering from malnutrition (grade I, II, III) in the operational area: 65 Children

7. Rationale for proposing the assessment

: To improve nutritional and health status of preschoolers and to achieve better nutritional security among preschoolers.

8. Technology options being assessed along with justification

Sl.No.	Technological Options	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	Locally available food grains		
2.	Technological Option 1	Ragi malt (Ragi, Wheat and	UAS (B)	To achieve nutritional
		Green gram)		security and to reduce
3.	Technological Option 2	Ragi malt with 10% soy flour	UAS (B)	morbidity and mortality
				because of Protein Energy
				Malnutrition

9. Parameters to be measured in relation to the technology : 1. Anthropometric measurements

- 2. Nutritional survey
- 3. Acceptability

#### 10. Details of farmers

Sl.No.	Name of Village	No. of children	Unit (No.)
1.	Mallenahalli	10	1 Anganavadi center
2.	Kandagal	10	1 Anganavadi center

## 11. Budget for Assessment

S. No	Critical inputs for technological options						
5. 110	Name	Qty.	<b>Unit Cost</b>	<b>Total Cost</b>			
1	Ragi malt	60 kg	80-00/kg	4800-00			
2	Ragi malt with soy flour	60 kg	85-00/kg	5100-00			
			Total	9900.00			

#### PLAN OF ON FARM TESTING IN CASE OF ASSESSMENT

#### ENRICHED COMPOSITE FLOUR

1. Title of the technology to be assessed : Impact of composite flour on nutritional status of adolescent girls

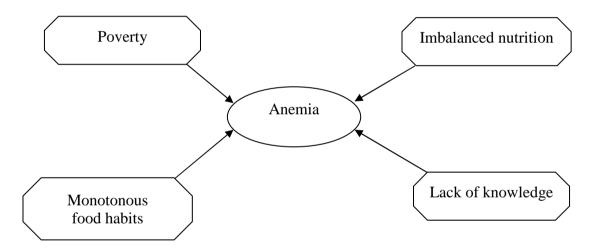
2. Agro-Ecological Zone : Zone IV (Davanagere)

3. Production System :

4. Problem definition : Prevalence of anemia among adolescent girls which leads to growth retardation, mental stress and low work

efficiency

5. Problem Cause Diagram :



6. Number of adolescent girls suffering from anemia in the operational area : 45 girls

7. Rationale for proposing the assessment : To improve health status of adolescent girls

## 8. Technology options being assessed along with justification

Sl.No.	<b>Technological Options</b>	Details of Technology	Source of Technology	Justification
1.	Farmer's Practice	Normal food habit	1	
2.	Technological Option 1	Composite flour (Wheat, Seed Amaranth , Soy, Greengram, Meti powder)	UAS (B)	To achieve nutritional security among adolescent girls and to reduce mental stress in turn improves work efficiency.

- 9. Parameters to be measured in relation to the technology
- : 1. Anthropometric measurements
- 2. Nutritional survey
- 3. Acceptability

#### 10. Details of farmers

Sl.No.	Name of Village	No. of Girls
1.	Ramagondanahalli	10

# 11. Budget for Assessment

S. No	Critical inputs for technological options					
5.110	Name	Qty.	Unit Cost	<b>Total Cost</b>		
1	Composite flour	90 kg	50-00/kg	4500-00		
			Total	4500-00		

#### 4. Details of Frontline Demonstrations

# PLAN OF FRONT LINE DEMONSTRATIONS FOR 2008-09 Including Oilseeds, Pulses, Cotton, Cereals, Horticultural Crops, Plantation Crops, Commercial Crops And Enterprises

# **MAIZE**

1. Technology to be demonstrated : **Popularization and nutrient management in maize hybrid (NAH-2049).** 

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4. Problem definition : Low yield, no micronutrient application, no potash application, stem borer.

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Maize	20-22	24-25	16-22	<ul> <li>Local hybrids</li> <li>Recommended dose of fertilizers not used</li> <li>No micro nutrient application</li> <li>Stem borer problem</li> </ul>	Low yield due to stem borer and no potash application.

5. Objective of the demonstration : Increase the yield through the use of resistant hybrid.

6. Rationale for selection of the technology : Use of resistant hybrid will reduce the stem borer incidence inturns increases the yield.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Resistant variety (NAH-2049)	UAS, Bangalore		Resistant to stem borer and downey mildew

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Number of seeds/rows per cob

3. Income/ha

# 9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)	Sl.No.	Name of Village	Name of Farmer	Area(ha)
1	Hodigere	G.S. Mahesh	0.4	19	Kandagal	Shashidhara	0.4
2		Kubendrappa	0.4	20		G. B Thippeswamy	0.4
3		Rajanna	0.4	21		K.M. Nagarajappa	0.4
4		Nagaraja	0.4	22		K.G. Shankaramurthy	0.4
5		Halesh	0.4	23		Madhusudhana	0.4
6		Srinivas	0.4	24		K. Verrabharappa	0.4
7		Kenchappa	0.4	25		Nagaraja .C.R	0.4
8		Revakka	0.4	26		Yathish	0.6
9		Murigeppa	0.4	27		N.R. Arunakumar	0.4
10		G.S. Girish	0.4	28		Kallesh C.M	0.4
11		Prabhakar	0.4	29		Rajeshwari	0.4
12		Thirtharaj Neelamma	0.4	30		Verranna	0.6
13		Basavanagowda	0.4	31		Neelappa	0.4
14		Ramesha	0.4	32	Mallenahalli	Siddesh	0.4
15		Ninganna	0.4	33		Prassana	0.6
16	Bommenahalli	Rudreshappa	0.4	34	1	Mahendra	0.4
17		Niramala	0.4	35	1	Revanna	0.4
18		Halleshappa	0.4	36	]	Mamatha	0.4
		Total	7.2			Total	7.8

# 10. Budget for Assessment

S. No	Critical inputs for demonstrations					
5.110	Name	Qty.	<b>Unit Cost</b>	<b>Total Cost</b>		
1	Seeds (NAH-2049)	225 kg	Rs. 40/ kg	9000-00		
2	MOP	7.5 q	Rs. 400/ q	3000-00		
3	Zinc sulphate	150 kg	Rs. 60/ kg	9000-00		
			Total	21000-00		

# **PADDY**

1. Technology to be demonstrated : Introduction and Popularization of high yielding variety (TANU-KMP-101)

2. Production System : Irrigated 3. Season of the demonstration : Kharif

4. Problem definition : Improper nutrient management, BPH and blight.

	Yield gap (q/ha)				
Стор	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Paddy	25 q	30-40 q	20-25 q	<ul> <li>Improper nutrient management</li> <li>No knowledge on seed treatment</li> <li>BPH and BLB</li> <li>Planting of aged seedlings</li> </ul>	Low yield

5. Objective of the demonstration : Popularization of high yielding TANU variety

6. Rationale for selection of the technology : Continuous use of local variety has reduced the yield with high pest incidence.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
TANU (KMP-101)	UAS, Bangalore		- 130-135 days duration - Medium rice
1711(0 (111/11 101)	Cris, Bungarore		- Expected yield 45-50q/ha

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Number of hills per plant

3. Number of panicle per plant

4. Income/ha

# 9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Prabhakar	0.4
2.	V1.:	Veeresh	0.4
3.	- Kurki -	Shanmugha	0.4
4.		Kallesh	0.4
5.		Mamatha w/o Ravikumar	0.4
6.	Mallenahalli	Savithramma	0.6
7.		Rathnamma	0.4
8.		Manjappa	0.4
9.		Basavarajappa	0.4
10.		Mahesh	0.4
11.	Kandagal	Palakshappa	0.4
12.		Dhanyakumar	0.4
		Total	5.0

# 10. Budget for Assessment

S. No	Critical inputs for demonstrations					
	Name	Qty.	Unit Cost	<b>Total Cost</b>		
1	Seeds (TANU)	310 kg	Rs. 13 /kg	4030-00		
2	Pheromone traps	25 No.	Rs. 250/ha	1250-00		
			Total	5280-00		

# **RAGI**

1. Technology to be demonstrated : Popularization high yielding variety (GPU-28)

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4.Problem definition : Low yield, local varieties, no bio-fertilizer, no micro nutrient application, no recommended dose of fertilizer.

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Ragi	15-20	30	12-15	<ul><li>Growing local varieties</li><li>High seed rate</li><li>No bio fertilizers</li><li>No RDF/micronutrient</li></ul>	Low yield

5. Objective of the demonstration : Popularization of high yielding variety for increasing the yield.

6. Rationale for selection of the technology : Replacement of local variety with HYV increases the production and productivity.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
GPU – 28	UAS, Bangalore	ł	<ul><li>Neck blast resistant</li><li>110 to115 days duration</li><li>Suited for August sowing</li></ul>

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Number of Fingers per plant

3. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.	Chikkabantanahalli	Basavaraj M.S.	1.0
2.		Mahantesha D.	1.0
3.		Ramesha	1.0
4.		Ningappa	1.0
5.		Anandamma K.	1.0
6.		Parvathamma	1.0
7.		Renukamma	1.0
8.		Chandrappa M.B.	1.0
9.		Nagaiah B.M.	1.0
10.		Karibasaiah	1.0
11.		Shadakshari	1.0
12.		Ravikumar	1.0
13.		Nagaraj	1.0
14.		Basavaraj	1.0
15.	Hodigere cluster	Prabhakar	1.0
16.	Hodigere cluster	Kuberappa	1.0
17.		Girishappa	1.0
18.		Gajendrappa	1.0
19.		Shivaraj	1.0
20.		Gururaj	1.0
	·	Total	20.0

S. No	Critical inputs for demonstrations					
5.110	Name	Qty.	Unit Cost	<b>Total Cost</b>		
1	Seeds (GPU-28)	240 kg	Rs. 15/ kg	3600-00		
2	Seed treatment Bio fertilizers	8 kg	Rs. 100 for 400 gm	2000-00		
3	Micro nutrient Zinc	50 kg	Rs. 60/kg	3000-00		
			Total	8600-00		

## **NAVANE**

1. Technology to be demonstrated : Popularization high yielding variety (RS-118)

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4. Problem definition : Low yield, local varieties, no bio-fertilizer, no recommended dose of fertilizer.

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Navane			4.0	<ul><li>Growing local varieties</li><li>High seed rate</li><li>No bio fertilizers</li><li>No RDF/micronutrient</li></ul>	Lower productivity

5. Objective of the demonstration : Popularization of high yielding variety by increasing the yield.

6. Rationale for selection of the technology : Replacement of local variety with HYV increases the production and productivity.

7. Details of Technology to be demonstrated :

Name of the technology	Source of Technology	Year of release	Attributes of Technology
RS-118	UAS, Bangalore	ł	- 100 days duration - Suitable for late sowing - Yield 10-15 q/ha

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Number of Fingers per plant

3. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Basavaraj M.S.	0.6
2.		Mahantesha D.	0.4
3.		Ramesha	0.6
4.		Ningappa	0.6
5.		Anandamma K.	0.4
6.	Chikkabantanahalli	Parvathamma	0.4
7.		Renukamma	0.6
8.		Chandrappa M.B.	0.4
9.		Nagaiah B.M.	0.4
10.		Karibasaiah	0.6
		Total	5.0

S. No	Critical inputs for demonstrations						
5. 110	Name	Qty.	Unit Cost	<b>Total Cost</b>			
1	Seeds (RS-118)	50 kg	Rs. 15/kg	750-00			
2	Seed treatment Bio fertilizers	2 kg	Rs. 100 for 400 gm	500-00			
3	Fertilizer N- 40 kg (Urea) P-40 kg (SSP)	4.26 q 3.32 q	Rs. 500/q Rs. 400/q	2130-00 1328-00			
			Total	4708-00			

# **SUGARCANE**

1. Technology to be demonstrated : Popularization woolly aphid resistant variety (CO-VC-2003-165)

2. Production System : Irrigated 3. Season of the demonstration : Kharif

4. Problem definition : Low yield, woolly aphid

Yield gap (ton/ha)					
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Sugarcane	100-120	150-160	80-100	<ul><li>Incidence of Woolly aphid</li><li>Difficult for spraying to control</li></ul>	Woolly aphid

5. Objective of the demonstration : Popularization woolly aphid resistant variety.

6. Rationale for selection of the technology : Difficult to control, wider spacing can be used for inter cropping with vegetables to generate additional

income with in 3-4 months.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
CO-VC- 2003-165	VC farm Mandya UAS- Bangalore		- Set - 6 tons/ha - Woolly aphid resistant

8. Parameters to be measured in relation to the technology : 1. No

: 1. Number of hills per plant

2. Sugarcane recovery percent

3. Income/ha

9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Nagendrappa	0.4
2.		Somashekharaiah	0.4
3.	Kandagal cluster	Chandrappa	0.4
4.		Nagaraj	0.4
5.		Sureshappa	0.4
		Total	2.0

#### 10. Budget for Assessment

S. No	Critic	r demonstrations		
5. 110	Name	Qty.	Unit Cost	<b>Total Cost</b>
1	Setts CO-VC-2003-165	12 tons	Rs. 1500/ton	18000-00
			Total	18000-00

## **COTTON**

1. Technology to be demonstrated : **Integrated Crop Management** 

2. Production System : Rainfed/Irrigated

3. Season of the demonstration : Kharif

4. Problem definition : No RDF, Sucking pest, Boll worms, Leaf reddening and square drying

		Yield gap (q/ha)			
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Cotton	28-35	40-42	10-12	<ul> <li>Use of local hybrids</li> <li>Square drying</li> <li>Non availability of Bt seeds</li> <li>Leaf reddening</li> <li>Boll worms and sucking pest</li> </ul>	Decreased cultivable area

5. Objective of the demonstration : To increase the area and yield of Cotton

6. Rationale for selection of the technology : The area under cotton has to be increased with increasing the yield inturn by reducing cost of production.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
ICM in Bt Cotton			<ul><li>Resistant to Boll worm</li><li>More number of bolls per plant</li></ul>

8. Parameters to be measured in relation to the technology

: 1. Plant height2. Number of bolls per plant3. Yield and Income/ha

# 9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)	Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Shadakshari	0.4	26.		Neelamma	0.4
2.	7	Ravikumar	0.4	27.		Kantanna	0.4
3.		Nagaraj	0.4	28.	Hadiaana	Karisiddaiah	0.4
4.		Basavaraj	0.4	29.	Hodigere	Rudresh	0.4
5.		Prabhakar	0.4	30.		Virupakshappa	0.4
6.		Kuberappa	0.4	31.		Mallikanna	0.4
7.	7	Girishappa	0.4	32.		Siddalingappa	0.4
8.	7	Gajendrappa	0.4	33.	<b>A</b>	Kuberappa	0.4
9.		Shivaraj	0.4	34.	- Anajigere	Kenchappa	0.4
10.		Gururaj	0.4	35.		T.Bharamagowda	0.4
11.	7	Siddesh	0.4	36.		Hanumakka	0.4
12.	7	G.S. Mahesh	0.4	37.		Hanumanthappa	0.4
13.	Hodigere	Kubendrappa	0.4	38.		Thuodur uchhangamma	0.4
14.		Rajanna	0.4	39.		Parushappa	0.4
15.		Nagaraja	0.4	40.		A.K. Gonapp	0.4
16.		Halesh	0.4	41.		B.Shivanna	0.4
17.		Srinivas	0.4	42.		Kariyappa	0.4
18.		Kenchappa	0.4	43.	D 1711	Kotresh	0.4
19.		Revakka	0.4	44.	Budihal	T. Benuvappa	0.4
20.		Murigeppa	0.4	45.		S. Shivakumar	0.4
21.		G.S. Girish	0.4	46.		Rajappa	0.4
22.		Prabhakar	0.4	47.		S. Shivappa	0.4
23.		Thirtharaj Neelamma	0.4	48.		K. Shivakumar	0.4
24.	7	Basavanagowda	0.4	49.		Narappa	0.4
25.		Ramesha	0.4	50.		Basamma	0.4
	•	Total	10.0		1	Total	10.0

#### 10. Budget for Assessment

S. No	Critical inputs for demonstrations						
5. 110	Name	Qty.	Unit Cost	Total Cost			
1	Full package is followed (Seeds, seed treatment chemical, growth regulator, vermicompost, pesticides)		Rs. 1400/acre	70000-00			
			Total	70000-00			

### **GROUNDNUT**

1. Technology to be demonstrated : Integrated Crop Management and popularization of disease resistant variety GPBD-4

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4. Problem definition : Collar rot, root rot and wilting, tikka, no gypsum application, more energy, labour and time consumption for stripping and

shelling

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Groundnut	12-15	18-20	8-12	<ul><li>Use of local varieties</li><li>No seed treatment</li><li>No gypsum application</li><li>Collar rot , Tikka</li></ul>	Lower productivity of the crop

5. Objective of the demonstration : Popularizing of resistant variety and to increase the area under GPBD-4.

6. Rationale for selection of the technology : To reduce the cost of production and increase the yield using HYV.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
GPBD-4	UAS- Bangalore		<ul><li>Resistant to Tikka</li><li>Suited for central dry zone</li><li>105-110 days duration</li></ul>

8. Parameters to be measured in relation to the technology

: 1. Number of seeds per plant

2. Seed weight3. Yield and Income/ha

### 9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Shivaraj	0.4
2.		Gururaj	0.4
3.		Siddesh	0.6
4.	7	G.S. Mahesh	0.4
5.	1	Kubendrappa	0.4
6.	Hodigere	Rajanna	0.4
7.	]	Nagaraja	0.4
8.	7	Halesh	0.4
9.	7	Srinivas	0.6
10	7	Kenchappa	0.4
11.	7	Shadakshari	0.6
		Total	5.0

S. No	Criti	r demonstrations		
S. NO	Name	Qty.	Unit Cost	<b>Total Cost</b>
1	GPBD-4 Seeds	550 kg	Rs. 40 / kg	22000-00
2	Trichoderma	2.2 kg	Rs. 300/kg	660-00
3	Gypsum	2.5 tons	Rs. 1000/ton	2500-00
			Total	25160-00

# **GROUNDNUT**

1. Technology to be demonstrated : Integrated Crop Management and popularization of disease resistant variety GPBD-4

2. Production System : Irrigated 3. Season of the demonstration : Rabi/Summer

4. Problem definition : Collar rot, root rot and wilting, Tikka, No gypsum application, More energy, labour and time consumption for stripping

and

shelling

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Groundnut	12-15	18-20	8-12	<ul><li>Use of local varieties</li><li>No seed treatment</li><li>No gypsum application</li><li>collar rot, Tikka</li></ul>	Lower productivity of the crop

5. Objective of the demonstration : Popularizing of resistant variety and seed production.

6. Rationale for selection of the technology : To reduce the cost of production and increase the yield using HYV.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
GPBD-4	UAS- Bangalore		<ul><li>Resistant to Tikka</li><li>Suited for central dry zone</li><li>105-110 days duration</li></ul>

8. Parameters to be measured in relation to the technology : 1. Number of seeds per plant

2. Seed weight

3. Yield and Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Mamatha	0.4
2.		Mahendra	0.4
3.	-	Siddlingappa	0.4
4.		Revanasiddappa	0.4
5.	- Mallenahalli	Jayappa	0.6
6.		Rathnamma	0.4
7.		Karibasappa	0.4
8.		Vishalamma	0.4
9.		Sharadamma	0.4
10.		Shanthamma	0.4
11.		Giriyappa	0.4
12.		Mahadevappa	0.4
		Total	5.0

S. No	Critic	r demonstrations		
5.110	Name	Qty.	<b>Unit Cost</b>	<b>Total Cost</b>
1	GPBD-4 Seeds	550 kg	Rs. 40 / kg	22000-00
2	Trichoderma	2.2 kg	Rs. 300/kg	660-00
3	Gypsum	2.5 tons	Rs. 1000/ton	2500-00
			Total	25160-00

# **SUNFLOWER**

1. Technology to be demonstrated : Integrated Crop Management and introduction of KBSH-53

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4. Problem definition : Improper nutrient management, lack of knowledge on seed treatment, bud necrosis and downy mildew.

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Sunflower	5-6	10-12	4-8	<ul><li>Non availability of truthful seeds</li><li>No seed treatment</li><li>Bud necrosis</li><li>Improper nutrient management</li></ul>	Lower productivity due to occurrence of pest and diseases

5. Objective of the demonstration : Introduction of high yielding hybrids.

6. Rationale for selection of the technology : Pest and disease incidence as increased in the hybrids.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
KBSH-53	UAS - Bangalore	2008	- 90 days duration - High yielding hybrid

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Size of heads (cm)

3. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.	Hodigere cluster	Neelamma	0.4
2.		Kantanna	0.4
3.		Karisiddaiah	0.6
4.		Rudresh	0.4
5.		Virupakshappa	0.4
6.		Mallikanna	0.6
7.	Kandagal cluster	M. Manjunatha	0.4
8.		K.B. Rudresh	0.4
9.		G.B. Thippeswamy	0.6
10.		K.M. Harish	0.4
11.		G. S. Channabasappa	0.4
	_	Total	5.0

S. No	Critical inputs for demonstrations					
5. 110	Name	Qty.	Unit Cost	<b>Total Cost</b>		
1	Seeds (KBSH-53)	25 kg	Rs. 140/kg	3500-00		
2	Imidaclopid (5 gm/kg of seed)	125 g	Rs. 500/ha	2500-00		
3	Neem (5%)	5 L	Rs. 750/L	3750-00		
4	Zinc sulphate	50 kg	Rs. 60/ kg	3000-00		
5	MOP	4 q	Rs. 400/q	1600-00		
6	Boron	13 kg	Rs. 200/kg	2600-00		
		_	Total	16950-00		

# **SUNFLOWER**

1. Technology to be demonstrated : Integrated Crop Management and introduction of KBSH-53

2. Production System : Irrigated 3. Season of the demonstration : Rabi/Summer

4. Problem definition : Improper nutrient management, lack of knowledge on seed treatment, bud necrosis and downy mildew.

		Yield gap (q/ha)			
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Sunflower	5-6	10-12	4-8	<ul><li>Non availability of truthful seeds</li><li>No seed treatment</li><li>Bud necrosis</li><li>Improper nutrient management</li></ul>	Lower productivity due to occurrence of pest and diseases

5. Objective of the demonstration : Introduction of high yielding hybrids.

6. Rationale for selection of the technology : Pest and disease incidence as increased in the hybrids.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
KBSH-53	UAS - Bangalore	2008	- 90 days duration - High yielding hybrid

10. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Size of heads (cm)

3. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Thuodur uchhangamma	0.6
2.		Parushappa	0.4
3.		A.K. Gonapp	0.4
4.		B.Shivanna	0.6
5.	Budihal cluster	Kariyappa	0.6
6.		Kotresh	0.4
7.		T. Benuvappa	0.4
8.		S. Shivakumar	0.6
9.		Rajappa	0.4
10.		S. Shivappa	0.6
		Total	5.0

S. No	Critical inputs for demonstrations					
5. 110	Name	Qty.	Unit Cost	Total Cost		
1	Seeds (KBSH-53)	25 kg	Rs. 140/kg	3500-00		
2	Imidaclopid (5 gm/kg of seed)	125 g	Rs. 500/ha	2500-00		
3	Neem (5%)	5 L	Rs. 750/L	3750-00		
4	Zinc sulphate	50 kg	Rs. 60/ kg	3000-00		
5	MOP	4 q	Rs. 400/q	1600-00		
6	Boron	13 kg	Rs. 200/kg	2600-00		
			Total	16950-00		

# **REDGRAM**

1. Technology to be demonstrated : Popularization and Integrated Pest Management in BRG-2

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4. Problem definition : Improper nutrient management, lack of knowledge on seed treatment, pod borer.

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Redgram	2	10-12	4	<ul><li>Use of local varieties</li><li>No seed treatment with bio fertilizers</li><li>Pod borer</li></ul>	Improper nutrient management

5. Objective of the demonstration : Popularization of HYV to increase the yield

6. Rationale for selection of the technology : To reduce the pest and disease incidence through IPM and variety suited for late sowing in Kharif.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
BRG-2	UAS - Bangalore		- Duration (150-170 days) - Seed and late sowing

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Number of pods per plant

3. Number of seeds per pod

4. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)		
1.		Ravikumar	0.6		
2.		Nagaraj	0.4		
3.		Basavaraj	0.4		
4.	Hodigere cluster	Prabhakar	0.6		
5.		Kuberappa	0.6		
6.		Girishappa	0.4		
7.		Gajendrappa	0.4		
8.		Shivaraj	0.6		
9.		Gururaj	0.4		
10.		Siddesh	0.6		
	Total 5.0				

S. No	Critical inputs for demonstrations					
S. NO	Name	Qty.	Unit Cost	Total Cost		
1	Seeds (BRG-2)	75 kg	Rs. 36/kg	2700-00		
2	PSB, Rhysobium	2 kg	Rs. 50/ha	500-00		
3	Trichoderma (4 gm/kg of seed)	3 kg	Rs. 300/kg	900-00		
4	Pheromone traps Ha lures	25 No.	Rs. 250/ha	1250-00		
5	Neem (5%)	5 L	Rs. 750/L	3750-00		
6	Quinolphous	5 L	Rs. 400/L	2000-00		
			Total	11100-00		

# **BENGALGRAM**

1. Technology to be demonstrated : Integrated Crop Management and introduction of JJ-11

2. Production System : Rainfed 3. Season of the demonstration : Kharif

4. Problem definition : Poor yield, Poor knowledge on seed treatment, Wilt and pod borer, Shriveled seeds, Loss of grains due to storage pests

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Bengalgram	5.5	8-10	4.8	<ul><li>Use of local varieties</li><li>No seed treatment</li><li>Wilt and pod borer</li></ul>	- Seed treatment - Wilt

5. Objective of the demonstration : To popularize wilt resistant variety

6. Rationale for selection of the technology : To increase the yield with introduction of high yielding disease resistant variety

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
JJ-11	UAS - Bangalore		- 95-100 days duration - Wilt resistant and drought tolerant

8. Parameters to be measured in relation to the technology : 1. Plant height (cm)

2. Number of seeds per plant

3. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)	Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		Bhoganiya Thippeswami	0.4	16.		T. Manjunatha	0.4
2.		Sanjeevareddi	0.4	17.		Devendrappa	0.4
3.		Venkannajja	0.4	18.		Subhan	0.4
4.		Andanagoudru Parameshwarappa	0.4	19.		Andanagoudru Rudrappa	0.4
5.		Somanthappa	0.4	20.	Bheemaneri	Andanagoudru Lokesh	0.4
6.		H.M. Nagarajappa	0.4	21.		Shivanna	0.4
7.	Bheemaneri	Channappagoudru	0.4	22.		Bhalappa	0.4
8.	Bilecinaneii	H.M. Shivarajappa	0.4	23.		A.C. Manjunatha	0.4
9.		K.B. Basavarajappa	0.4	24.		Yallavaa karmudi	0.4
10.	1	B.C. Rudreshi	0.4	25.	1	Chandrappa Karmuki	0.4
11.		B.H. Venkatesh	0.4				•
12.		Umesh.B.N	0.4				
13.		B.C. Basavaraja	0.4				
14.		Vishwanatha	0.4				
15.		G.T. Ravikumar	0.4				
•	_	Total	6.0		_	Total	4.0

S. No	Critical inputs for demonstrations							
5. NO	Name	Qty.	Unit Cost	<b>Total Cost</b>				
1	Seeds (JJ-11)	620 kg	Rs. 35/kg	21700-00				
2	PSB, Rhizobium	4 kg	Rs. 50/ha	1000-00				
3	Trichoderma (4 gm/kg of seed)	6 kg	Rs. 300/kg	1800-00				
4	Pheromone traps Ha lures	76 No.	Rs. 470/ha	4700-00				
5	Neem (5%)	15 L	Rs. 750/L	11250-00				
6	Quinolphous	15 L	Rs. 400/L	6000-00				
			Total	46450-00				

# **SOYBEAN**

1. Technology to be demonstrated : Introduction and production technology high yielding variety (Monette/KB-79)

2. Production System : Rainfed/Irrigated

3. Season of the demonstration : Kharif

4. Problem definition : Soil health, Mono cropping, No inter cropping

Yield gap (q/ha)					
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Soyabean	1	10-15	8	<ul><li>Local varieties</li><li>Market problem</li><li>No value addition</li></ul>	- Local varieties - Value addition

5. Objective of the demonstration : Popularization of soyabean as a sole crop/intercrop 6. Rationale for selection of the technology : To increase the soil health, intercropping in sugarcane

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Monette/KB-79	UAS - Bangalore		<ul><li>- 80-85 days duration</li><li>- Short duration and intercrop in sugarcane</li></ul>

8. Parameters to be measured in relation to the technology : 1. Number of pods per plant

2. Number of seeds per pod

3. Income/ha

Sl.No.	Name of Village	Name of Farmer	Area(ha)			
1.		Mamatha	0.4			
2.		Mahendra	0.4			
3.		Siddlingappa	0.4			
4.		Revanasiddappa	0.4			
5.	Mallenahalli	Jayappa	0.6			
6.		Rathnamma	0.4			
7.		Karibasappa	0.4			
8.		Vishalamma	0.4			
9.		Sharadamma	0.4			
10.		Shanthamma	0.4			
11.		Giriyappa	0.4			
12.		Mahadevappa	0.4			
	Total 5.0					

S. No	Critical inputs for demonstrations						
5. 110	Name	Qty.	Unit Cost	<b>Total Cost</b>			
1	Seeds (Monette/KB-79)	310 kg	Rs. 40/kg	12400.00			
2	PSB, Rhizobium	4 kg	Rs. 50/ha	1000-00			
3	Trichoderma (4 gm/kg of seed)	6 kg	Rs. 300/kg	1800-00			
4	Thiram (100g /ha)	500gm	Rs.70/100g	350-00			
4	Pheromone traps Sl lures	25 No.	Rs. 470/ha	2350-00			
5	Neem (5%)	5 L	Rs. 750/L	11250-00			
6	Melothion/Methyl parathion(50 E.C)	3L	Rs. 400/L	1200-00			
	Total						

## **BANANA**

1. Technology to be demonstrated : Application of Banana special

2. Production System : Irrigated 3. Season of the demonstration : Kharif

4. Problem definition : Lower bunch weight due to deficiency of micronutrients

	Yield gap (q/ha)					
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem	
Banana	250	400	180	<ul> <li>Application of 17:17:17 with DAP twice.</li> <li>Poor knowledge on use of micronutrients</li> </ul>	Lower bunch weight	

5. Objective of the demonstration : To popularize the use of Banana special spray.

6. Rationale for selection of the technology : Micronutrient spray increases bunch weight and in turn helps in increasing productivity.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Banana special	IIHR, Bangalore		Micronutrient spray helps in increasing the finger size in turn helps in increased bunch weight.

8. Parameters to be measured in relation to the technology : 1. Number of fingers in the bunch.

2. Total weight of the bunch.

3. Total yield/ha.

#### 9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.	Marabanahalli	R.S. Patil	0.2
2.	Marabanahalli	Nagaraj	0.2
3.	Gondihosahalli	Onkarappa	0.2
4.	Gondihosahalli	Lokesh	0.2
5.	Davanagere	Anandappa	0.2
		Total	1.0

### 10. Budget for Assessment

S. No	Critical inputs for demonstrations						
5. 110	Name	Qty.	Unit Cost	<b>Total Cost</b>			
1	Banana special	30 kg	Rs. 150/kg	4500.00			
2	Shampoo	250 No.	Rs. 1.5/pack	375.00			
3	Lemon	250 No.	Rs. 2.00	500.00			
			Total	5375.00			

# **COCONUT**

1. Technology to be demonstrated : Integrated Management of Black headed caterpillar in Coconut

: Irrigated

2. Production System3. Season of the demonstration : Kharif/Rabi summer

4. Problem definition : Higher incidence of BHC due to lower resistance by plants

	Yield gap (nuts/bunch)					
Crop	District average yield	Potential yield	Farmers yield		Reasons for yield gap	Prioritized problem
Coconut	50	80	20	•	Application of complex fertilizer @ 100g/palm Poor knowledge on use of micronutrients. Non use of organic manures	Higher incidence of BHC

5. Objective of the demonstration

: Integrated Management of BHC.

6. Rationale for selection of the technology

: Integrated approach helps in reducing the pest incidence significantly.

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Root feeding with Azadirectin     (15 ml/ plant-3 times –Jan – Feb,     Apr-May, Sept-Oct )     Release of parasite <i>Goniozus</i> nephentidis	POP, UAS Bangalore		<ul> <li>Root feeding of the chemical enters the plant system, caterpillars on leaf feeding dies in turn helps in prevention of BHC population.</li> <li>Release of parasites in the summer months bring down BHC population.</li> </ul>
3. Mechanical control			<ul> <li>Cutting and burning of infested fronds prevents spreading of BHC.</li> </ul>

- 8. Parameters to be measured in relation to the technology
- : 1. Number of bunches/palm.
- 2. Number of nuts/palm.
- 3. Screening for incidence of BHC4. Percent increase of yield over control.

Sl.No.	Name of Village	Name of Farmer	Area(ha)	Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.		G.M. Jayadevappa	0.4	26		M. Shivamurhayya	0.4
2.		G.N. Maheshwarappa	0.4	27		A.K. Chikkappa	0.4
3.		T. Chandrappa	0.4	28		Gowdra Basappa	0.4
4.		T. Bharmgowda	0.4	29		Hanuma Reddi	0.4
5.		T. Basavaraj	0.4	30	Devarabelakere	K.R. Channabasappa	0.4
6		N. Indhudhara	0.4	31		M.Basappa	0.4
7		D. Gurubasappa	0.4	32		G.N. Nanjundeshwara	0.4
8		B. Karibasappa	0.4	33		K.Jayappa	0.4
9		T. Dharmegowda	0.4	34		D.N.Paramehwarappa	0.4
10	T' 1'	N. Shekarappa	0.4	35		Basavarajappa	0.4
11	Jigali	C. Hanumagowda	0.4	36		Vishwanth	0.4
12		C. Bharamgowda	0.4	37		M. Rudramuni	0.4
13		Hanumagowda	0.4	38		S.T. Thippeswamy	0.4
14		C. Mallappa	0.4	39	Thurchghatta	M. Chandrappa	0.4
15		Nanjappa	0.4	40	_	G.S. Channabasappa	0.4
16		Ramangowda	0.4	41		T.H. Kallappa	0.4
17		Devirappa	0.4	42		S.N. Jayappa	0.4
18		Shekarappa	0.4	43		M.K. Gurupadappa	0.4
19		G.N. Siddangowda	0.4	44	Bullapura	T. Basappa	0.4
20		B. Basavaraj	0.4	45	Chandranahalli	K.H. Hanumanthraj	0.4
21		Ramanaik	0.4	46		Eshwarappa	0.4
22		Ramachandranaik	0.4	47		Mahesh	0.4
23	Tholahunase	Kampalappa	0.4	48	Kandagallu	T.C. Bhojaraj	0.4
24		Basavarajappa	0.4	49	-	G.S. Channabasappa	0.4
25		Shanmukappa	0.4	50		K.M. Basavaraj	0.4
		Total	10.0		Total		10.0

#### 10. Budget for Assessment

S. No	0	emonstrations		
Name		Qty.	Unit Cost	Total Cost
1	Azadirectin*- 1st dose	30 L	Rs. 650/L	19500.00
2	Goniozus nephentidis	15 No./palm	Supplied b	y KSDH, Davanagere
* Rema	ining two doses are farm	n Total	19500.00	

### **ARECANUT**

1. Technology to be demonstrated : Integrated Nutrient Management

2. Production System : Irrigated

3. Season of the demonstration : Kharif/Rabi summer

4. Problem definition : Button shedding due to deficiency of micronutrients.

		Yield gap (q/ha)			
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
				<ul> <li>Application of complex fertilizer @ 100g/palm</li> <li>Poor knowledge on use of</li> </ul>	
Arecanut	15-16	20-22	10-12	<ul><li>micronutrients and potash.</li><li>Non use of organic manures</li></ul>	Button shedding
				• Poor water management.	

5. Objective of the demonstration : Integrated Nutrient Management.

6. Rationale for selection of the technology : Integrated Nutrient Management increases the productivity and use of micronutrient prevents button shedding.

7. Details of Technology to be demonstrated:

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Integrated Nutrient Management Murate of Potash- 230g/pl Borax- 25g/pl	POP, UAS Bangalore		Application of organic manures increases soil fertility, use of potash helps in imparting resistance to pest and diseases and also prevents button shedding.

- 8. Parameters to be measured in relation to the technology
- : 1. Screening for incidence of button shedding.
- 2. Number of inflorescence/tree.
- 3. Yield/ha.

Sl.N o.	Name of Village	Name of Farmer	Area (ha)	Sl.No.	Name of Village	Name of Farmer	Area (ha)
1.	Tholahunase	Nagarajappa	0.4	26	Daginakatte	Sathish M.B	0.4
2.		Basavarajappa	0.4	27		Shivashankarappa	0.4
3.		Ningappa	0.4	28		Maheshwarappa	0.4
4.		Lingaraju	0.4	29	Kamsagara	Chandrappa	0.4
5.		Veeranna	0.4	30		Gowramma	0.4
6	Hodigere	G.B. Nagarajgowda	0.4	31		Basavapattana	0.4
7		G.K. Basavarajappa	0.4	32	Basavapattana	R.R. Kusagur	0.4
8		G.S. Veerabhadrappa	0.4	33		Sannachannappa	0.4
9		G.H. Eshwarappa	0.4	34		Nanjundappa	0.4
10		G. Kubendrappa	0.4	35		M.G. Manjunath	0.4
11		H.G. Manjunath	0.4	36		Basavaraju	0.4
12		G.B. Mallikarjuna	0.4	37	Neeralagundi	Mallikarjunagowda	0.4
13		G.M. Bhojaraj	0.4	38		Eshwarappa	0.4
14	Marabanahalli	R.S. Patil	0.4	39		Veereshbabu	0.4
15		Nagaraj	0.4	40		Maheshgowda	0.4
16		Thippesh	0.4	41		Shantharaj	0.4
17		G. Benakappa	0.4	42		Somashekar	0.4
18		Doddabasappa	0.4	43	Kandagallu	Mahesh	0.4
19		Yogendrappa	0.4	44		S.B. Prakash	0.4
20		Janardhana	0.4	45		Channabasappa G.K.	0.4
21	Kotehal	M. Prakash	0.4	46		Veeranna	0.4
22		G. Eshwarappa	0.4	47		K.B. Rudresh	0.4
23		G. Chandregowda	0.4	48	Thurchaghatta	Basavarajappa	0.4
24		G. Ganeshappa	0.4	49		Mahadevappa	0.4
25	Daginakatte	D. M. Basavarajppa	0.4	50		Basappa	0.4

#### 10. Budget for Assessment

S. No	Critical inputs for demonstrations							
5.110	Name	Qty.	Unit Cost	<b>Total Cost</b>				
1	Borax	6.9 q	7000/q	48300.00				
2	Murate of potash	63.40 q	600/q	38040.00				
			Total	86340.00				

### **ONION**

1. Technology to be demonstrated : Popularization of variety Arka Kalyan.

2. Production System : Irrigated 3. Season of the demonstration : Kharif

4. Problem definition : Lower productivity of the crop due to use of local varieties and incidence of purple blotch disease.

	Yield gap (q/ha)				
Crop	District average yield	Potential yield	Farmers yield	Reasons for yield gap	Prioritized problem
Onion	12-15	15-20	10-12	<ul> <li>Use of local variety (Jagalur local)</li> <li>No seed treatment</li> <li>Purple blotch disease</li> </ul>	Lower productivity

5. Objective of the demonstration : Increase the productivity of Onion by popularization of HYV Arka kalyan.

6. Rationale for selection of the technology : HYV Arka kalyan has the potentiality of yielding 22-25 q/ha.

7. Details of Technology to be demonstrated:

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Popularization of HYV Arka kalyan			Attractive red coloured round bulbs.
	IIHR, Bangalore		Good keeping quality.
	min, Bangarore		Resistance to purple blotch disease.
			• High yielding (22-25 q/ha)

- 8. Parameters to be measured in relation to the technology
- : 1. Screening for incidence of Purple blotch.2. Size of the bulb.
- 3. Total bulb yield.

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.	Sokke	Anand	0.2
2.		Bhojanagowda	0.2
3.		Basamma	0.2
4.		Govindappa	0.2
5.	Chikkabantanahalli	Basavarajappa	0.2
6.	Chikkabantanahalli	Basaveshwarappa	0.2
7.	Katenahalli	Kotrabasappa	0.2
8.	Gopalpura	D.M. Mahantesh	0.2
9.	Gowripura	Bhojanagowda	0.2
10.	Tarehalli	Srinivasareddy	0.2
		Total	2.0

S. No	Critical inputs for demonstrations						
5.110	Name	Qty.	<b>Unit Cost</b>	<b>Total Cost</b>			
1	Seeds - Arka kalyan	10 kg	400/kg	4000.00			
2	Trichoderma	0.5 kg	200	200.00			
			Total	4200.00			

### GIRIRAJA AND GIRIRANI BIRDS

1. Technology to be demonstrated : Giriraja and Girirani poultry birds rearing in backyard free range conditions

2. Production System : Free range conditions (Backyard)

3. Season of the demonstration : All seasons

4. Problem definition : Lower body weight gain due to deficiency of energy source.

	Yield gap (q/ha)					
Enterprise	District average yield	Potential yield	Farmers yield		Reasons for yield gap	Prioritized problem
Poultry meat production	500-600 gms in 8 weeks	900-1000 gms in 8 weeks	400-500 gms in 8 weeks	•	Low genetic potential Lack of energy source	Nutrition (Deficiency of energy)

5. Objective of the demonstration : Introduce high yielding variety of poultry birds (Giriraja and Girirani) to farmers field.

6. Rationale for selection of the technology : Giriraja and Girirani poultry birds are well suited for backyard condition and gain body weight faster in less time.

7. Details of Technology to be demonstrated:

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Rearing of Giriraja and Girirani	LIAS Pangalora	1987	<ul><li>These birds grow faster in less time.</li><li>Gives more number of eggs/year</li></ul>
birds for meat purpose.	UAS, Bangalore	1907	<ul> <li>Disease resistant</li> </ul>
			<ul> <li>Meat is very tasty.</li> </ul>

8. Parameters to be measured in relation to the technology : 1.

: 1. Body weight gain.

2. No. of eggs produced.

3. Feed conversion efficiency.

Sl. No.	Name of Village	Name of Farmer
1.		Shivanna
2.		Renukarya
3.		Rudresh
4.		Mallesh
5.	Kallahalli cluster	Rathnamma
6.		Savithramma
7.		Nagaraju
8.		Venkatesha
9.		Karibasavaiah
10.		Siddaiah

S. No		strations		
5.110	Name	Qty.	<b>Unit Cost</b>	<b>Total Cost</b>
1	Giriraja and Girirani poultry birds	20 x 20	Rs. 30/ bird	12000-00
2	Maize	3 kg/bird for 8 weeks X 400 birds	Rs. 8.50 / kg	10200-00
3	Transportation			800-00
			Total	21000-00

### FEEDING CONCENTRATES FOR BETTER BODY WEIGHT GAIN IN SHEEP

1. Technology to be demonstrated : Feeding concentrates to sheep

2. Production System : Free range conditions

3. Season of the demonstration : All seasons

4. Problem definition : Lower body weight gain due to deficiency of energy and protein source.

Yield gap (q/ha)						
Enterprise	District average yield	Potential yield	Farmers yield		Reasons for yield gap	Prioritized problem
Sheep	12 kg at the time of maturity	16-18 kg at the time of maturity	10-11 kg at the time of maturity	•	Lack of proper nutrition Worm infestation	Lack of balanced feeds

5. Objective of the demonstration : To show the importance of feeding concentrates to sheep.

6. Rationale for selection of the technology : By feeding balanced feeds sheep gain body weight faster. By grazing sheep the nutrient requirement of the

animal

is not met properly which results in lower body weight gain.

7. Details of Technology to be demonstrated:

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Feeding concentrates for better body weight gain in sheep	UAS, Bangalore		<ul><li>Sheep grows faster in less time.</li><li>Gives more meat.</li><li>Disease resistance.</li></ul>

8. Parameters to be measured in relation to the technology : 1. Body weight gain.

2. Feed conversion efficiency.

Sl. No.	Name of Village	Name of Farmer
1.		R. Mahendrappa
2.		Chandrappa
3.		Nagamma
4.		D.S. Geetha
5.	Ligali almatan	Shankramma
6.	Jigali cluster	Ambujamma
7.		H.S. Chandru
8.		Chandrappa
9.		D. Kotramma
10.		G.D. Shivanagowda

S. No	C	strations		
5. 110	Name	Qty.	<b>Unit Cost</b>	<b>Total Cost</b>
1	Concentrates feed	50 kg x 10 farmers	Rs. 10 / kg	5000-00
2	De wormer	150 mgs x 10 farmers	Rs. 5 / tablet	50-00
3	Transportation			450-00
			Total	5500-00

# SAFE STORAGE OF PULSES

**1.**Technology to be demonstrated : **Scientific storage of pulses** 

2. Production System : -- 3. Season of the demonstration : Rabi

4. Problem definition : Post harvest losses of grains due to insect infestation

		Yield gap (q/ha)				
Crop/Enterprise	District average yield	Potential yield	Farmers yield		Reasons for yield gap	Prioritized problem
Post harvest technology	-1			•	Improper sun drying Stored in gunny bags	Post harvest loss due to bruchids

5. Objective of the demonstration : To reduce post harvest loss due to bruchid infestation.

6. Rationale for selection of the technology : Scientific storage of pulses prevents pest damage in pulse grains storage at household level.

7. Details of Technology to be demonstrated:

Name of the technology	Source of Technology	Year of release	Attributes of Technology
			Reduces damage of stored grains
			Low cost
Scientific storage of pulses	UAS, Bangalore		Simple and easy to adopt
			Drudgery reducing
			Prevents economic loss

8. Parameters to be measured in relation to the technology : 1. Weight of 100 grains

2. No. of seeds damaged in 100 seeds

3. Percentage of grain loss

Sl.No.	Name of Village	Name of Farm women	Unit	Sl.No.	Name of Village	Name of Farm women	Unit
1.	Hodigere	Ravikumar	01	11.	Bheemanere	B.C. Rudreshi	01
2.		Sunanada	01	12.		B.H. Venkatesh	01
3.		Menakshamma	01	13.		Umesh.B.N	01
4.		Rathnamma	01	14		B.C. Basavaraja	01
5.		Ganagamma	01	15.		Vishwanatha	01
6.		Girishappa	01	16.		Thippeswami	01
7.		Gajendrappa	01	17.		Sanjeevareddi	01
8.		Shivaraj	01	18.		Venkannajja	01
9.		Gururaj	01	19.		Andanagoudru Parameshwarappa	01
10.		Siddesh	01	20.		Somanthappa	01

S. No	Critical inputs for demonstrations					
5. 110	Name Qty. Unit Cost Total Co					
1	Plastic containers	20	400.00	8000.00		
			Total	8000.00		

# **MUSHROOM CULTIVATION**

8. Technology to be demonstrated : Utilization of quality mushroom seeds for better yield

9. Production System : -10. Season of the demonstration : Kharif

11. Problem definition Low production due to the non availability of quality seeds and unscientific methods involved in cultivation

		Yield gap (q/ha)	eld gap (q/ha)	
Crop/Enterprise	District average yield	Potential yield	Farmers yield	Reasons for yield gap Prioritized problem
Mushroom cultivation				<ul> <li>Crude method of mushroom cultivation</li> <li>Non availability of good quality seeds</li> </ul> Low production potentiality

12. Objective of the demonstration method

: To increase the productivity of mushrooms by using quality seeds and to demonstrate the scientific

of cultivation.

13. Rationale for selection of the technology

: Use of quality mushroom seeds and scientific method of cultivation improves yield

14. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Ittilization of quality much some			Higher yield potentiality
Utilization of quality mushroom seeds for better yield	UAS, Bangalore		Eco friendly
seeus ioi bettei yielu			Nutritions

8. Parameters to be measured in relation to the technology : 1. Yield

2. Income/ cycle

Sl.No.	Name of Village	Name of Farm women/ rural youth	Unit
1.	Davangere	Srikanth	01
2.	Devinagara	Bharathi	01
3.	Davanagere	Raghavendra	01
4.	Mallenahalli	Mamatha	01
5.	Davanageer	Ravi kumar	01

S. No	Critical inputs for demonstrations				
	Name	Qty.	Unit Cost	<b>Total Cost</b>	
1	Mushroom seeds (spawn)	25 kg	100.00/kg	2500.00	
	PP bags	2.5 kg	140.00/ kg	350.00	
	Formalin	500 ml	1200.00/ L	600.00	
	Nylon threads	10 kg	120.00 /kg	1200.00	
	Sprayer	5 No.	300.00	1500.00	
			Total	6150.00	

#### SUSTAINABLE INTEGRATED INLAND FISH FARMING

1. Technology to be demonstrated : Sustainable integrated inland fish farming

2. Production System : Irrigated 3. Season of the demonstration : Kharif

4. Problem definition : Low fish production and lower farm income

		Yield gap (q/ha)				
Crop	District average yield Potential yield		Farmers yield	Reasons for yield gap	Prioritized problem	
Fisheries	15	30	12	<ul> <li>a. Inadequate and improper fertilization</li> <li>b. Inadequate and improper feeding</li> <li>c. Low quality fish seed</li> <li>d. Improper stocking density</li> <li>e. Poaching</li> </ul>	Low yield and lower income per unit area	

5. Objective of the demonstration

: To popularize the inland polyculture of fishes and integrated aquaculture for improved farm income.

6. Rationale for selection of the technology

: Complete package of practices on inland aquaculture is developed and need to be extended for the

welfare of farmers at the earliest

7. Details of Technology to be demonstrated

Name of the technology	Source of Technology	Year of release	Attributes of Technology
Sustainable integrated inland fish farming	ICAR, New Delhi		Complete package of practices on fish farming and integrated aquaculture with an emphasis on enhanced income for small farmers

8. Parameters to be measured in relation to the technology : 1. Improved yield

2. Farm income per unit area

# 9. Details of Farmers Proposed

Sl.No.	Name of Village	Name of Farmer	Area(ha)
1.	Shyagale	M. Ramachandrappa	0.2
2.	K.N. Halli	T. Chandrappa	0.2
3.	Kalasappanagalli	G. Channnabasappa	0.2
4.	Davanagere	S.S. Siddaraju	0.2
5.	K.N. Halli	S.N. Siddesh	0.2
6.	Jigali	G.N. Basavangowda	0.2
7.	Kandagal	Palakshappa G.	0.2
8.	Kandgal	Chidanandappa M.S.	0.2
9.	Ajjihalli	M.C. Jayappa	0.2
10.	Kandagal	Umapathi K.H.	0.2

#### 10. Budget for Assessment

S. No	Critical inputs for demonstrations									
S. 110	Name	Qty.	Unit Cost (Rs.)	<b>Total Cost</b>						
1	Advanced fingerlings	20000	1-00 / fingerling	20000-00						
2	Vitamin mineral mixture	20 kg	80-00 / kg	1600-00						
3.	Vegetable seeds		500-00 per farmer	5000-00						
4.	Birds	300	30-00 / bird	9000-00						
,			Total	35600-00						

# **5. Details of Training activities**

5a. Plan of training programmes for farmers/farm women during 2008-09

Crop / Enterprise	Major problem	Objective of training programme	Training Title	Skill component involved	Duration (Days)	No. of Courses	Number of participants	Specify FLD/ OFT in relation the programme
1	2	3	4	5	6	7	8	9
Maize	<ul> <li>No micronutrient application</li> <li>No potash application</li> <li>Stem borer</li> <li>No value addition</li> </ul>	To create awareness regarding the use of micro nutrients and potash, resistant varieties.	<ul> <li>Improved cultivation practices</li> <li>Soil fertility and nutrient management</li> <li>Demonstration of maize sheller</li> <li>Value added products in maize</li> </ul>	<ul> <li>Seed treatment</li> <li>Cob sheller</li> <li>Preparation of maize products</li> </ul>	04	04	75	OFT - Integrated Nutrient Management in Maize FLD - Popularization and nutrient management in Maize hybrid (NAH- 2049)
Paddy	<ul><li>Improper nutrient management</li><li>BPH and blight</li></ul>	To increase the yield with minimum cost of production.	<ul> <li>Nursery management</li> <li>INM</li> <li>Role of pheromone traps for management of stem borer</li> </ul>	<ul><li>Seed treatment</li><li>Pheromone trap installation</li></ul>	02	04	50	Introduction and popularization of high yielding variety (TANU-KMP-101)
Minor millets (Ragi and Navane)	<ul> <li>Low yield</li> <li>Local varieties</li> <li>No bio-fertilizer</li> <li>No micro nutrient application</li> <li>No recommended dose of fertilizer</li> </ul>	To popularize the Ragi and Navane minor millets as remunerative crop.	- Fertilizer management - Seed treatment with bio fertilizers - Value addition in ragi and navane	<ul> <li>Seed treatment with bio fertilizers</li> </ul>	02	02	35	Popularization high yielding variety (GPU-28) Popularization high yielding variety (RS-118)

1	2	3	4	5	6	7	8	9
Groundnut (Kharif/rabi)	<ul> <li>Collar rot, root rot and wilting</li> <li>Tikka</li> <li>No gypsum application</li> <li>More energy, labour and time consumption for stripping and shelling</li> </ul>	ICM	<ul> <li>Seed treatment</li> <li>INM and importance of gypsum</li> <li>Use of drudgery reducing equipments</li> </ul>	<ul><li>Seed treatment</li><li>Decorticator</li><li>Stripper</li></ul>	04	06	85	FLD - Integrated Crop Management and popularization of disease resistant variety GPBD-4
Sunflower (Rabi)	<ul> <li>Genuine seeds</li> <li>Bud necrosis and BHC</li> <li>No</li></ul>	IPM and INM	Improved cultivation methods Use of micronutrient spray Role of beneficial insects for seed setting	<ul><li>Seed treatment</li><li>Apiary</li></ul>	02	02	55	FLD- Integrated Crop Management and introduction of KBSH- 53
Bengalgram	<ul> <li>Poor yield</li> <li>Poor knowledge on seed treatment</li> <li>Wilt and pod borer</li> <li>Shriveled seeds</li> </ul>	ICM	<ul> <li>Seed         treatment and         fertilizer         management</li> <li>Role of         pheromone         traps in         management         of pod borer</li> </ul>	<ul><li>Seed treatment</li><li>Pheromone trap installation</li></ul>	03	02	40	FLD - Integrated Crop Management and introduction of JJ-11

1	2	3	4	5	6	7	8	9
Redgram	<ul> <li>Low yield</li> <li>Poor knowledge on use of bio fertilizers</li> <li>Pod borer</li> </ul>	IPM	<ul> <li>Production technology</li> <li>Importance of short duration varieties</li> <li>Installation of the pheromone traps</li> <li>IPM</li> </ul>	<ul><li>Seed treatment</li><li>Pheromone trap installation</li></ul>	02	02	35	FLD - Popularization and Integrated Pest Management in BRG-2
Soybean	<ul> <li>Mono cropping</li> <li>Poor soil fertility</li> <li>No value addition</li> </ul>	- Soil fertility management and crop rotation - Value addition to soybean	<ul> <li>Cultivation practices</li> <li>Importance of intercrop in Sugarcane</li> <li>Crop rotation and soil health management</li> <li>Value addition to soybean</li> </ul>	Preparation of soy milk and weaning mixes	01	01	25	FLD - Introduction and production technology high yielding variety (Monette/KB-79)
Cotton	<ul> <li>No RDF</li> <li>Sucking pest</li> <li>Boll worms</li> <li>Leaf reddening and square drying</li> </ul>	ICM	<ul> <li>Importance of Bt cotton</li> <li>Management of pest through pheromone traps Growth regulators</li> </ul>	<ul> <li>Seed treatment</li> <li>Sowing technique</li> <li>Pheromone trap installation</li> <li>Micronutrient spray</li> <li>Use of power weeder</li> </ul>	06	06	125	FLD – Integrated Crop Maanagement
Sugarcane	<ul><li>Low yield</li><li>Woolly aphid</li></ul>	To popularize the wooly aphid resistant variety	<ul><li>Production technology</li><li>Inter cropping</li></ul>	<ul><li>Set treatment</li><li>Planting techniques</li></ul>	02	02	42	FLD - Popularization woolly aphid resistant variety (CO-VC-2003- 165)

1	2	3	4	5	6	7	8	9
Coconut	<ul> <li>Low productivity</li> <li>Severe incidence of BHC</li> <li>Mites</li> <li>Poor nutrition</li> </ul>	To create awareness on improved production technologies in Coconut	<ul> <li>Improved production technologies in coconut</li> </ul>	<ul> <li>Root feeding of</li> <li>Monocrotophos</li> <li>Release of parasite</li> <li>Method of Fertilizer application</li> </ul>	02	04	200	Integrated management of BHC in Coconut
Banana	<ul> <li>Lower</li> <li>productivity</li> <li>Psuedostem weevil</li> <li>damage</li> <li>Panama wilt</li> </ul>	Create awareness on improved production technologies in Banana	Improved     Production     Technologies in     Banana.	<ul> <li>Selection of Sword suckers</li> <li>Sucker treatment</li> <li>with fungicides spray of Banana special</li> </ul>	02	03	200	Integrated Nutrient Management in Banana.
Fisheries	<ul> <li>Low fish production per unit area (0.5 to 0.8 t per ha)</li> <li>Incomplete technical knowhow of aquaculture technology</li> <li>Lower income per unit area</li> </ul>	To popularize the inland polyculture of fishes and integrated aquaculture for improved farm income	<ul> <li>Sustainable integrated fish aquaculture in inland ponds</li> <li>Aquaculture as a profitable entrepreneurship</li> <li>Fish seed rearing</li> <li>Fish farm management</li> </ul>	<ul> <li>Pond construction</li> <li>Pond preparation</li> <li>Seed selection         and stocking         density</li> <li>Feed formulation         and management</li> <li>Fertilizer         management</li> <li>Health         management</li> <li>Integration of         other agriculture         activities around         pond</li> </ul>	05	01	20	FLD - Popularization of pond integrated aquaculture with fish polyculture
Arecanut	- Button shedding - Lower productivity - Micronutrient deficiency	Integrated Nutrient Management	Integrated Nutrient Management in Arecanut	Method of fertilizer application	02	04	200	Integrated Nutrient Management in Arecanut.

1	2	3	4	5	6	7	8	9
Onion	<ul><li>Purple blotch disease</li><li>Low productivity due to use of local verities.</li></ul>	Popularization of HYV Arka Kalyan	Production technology of Onion.	Seed treatment with Trichoderma	02	05	300	Popularization of HYV Arka Kalyan
Dry land Horticulture	<ul><li>Major area in rain fed</li><li>Low water availability</li></ul>	Promote fruit crops in the dry land	Dry land horticulture	- Soil and water conservation techniques - Layout of fruit orchards	02	05	300	
Medicinal and Aromatic crops	- Production in smaller area.	Popularization of medicinal and aromatic crops.	Production technologies of Medicinal and Aromatic crops.	- Oil extraction methods	02	05	250	
Cattle	- Energy and protein deficiency in cattle	Educate farmers about nutrient requirement in cattle	Production of high yielding varieties of fodder crops and their nutritive value in cattle	<ul> <li>Mixing up of right proportions of leguminous and non leguminous fodder crops</li> <li>Chaffing of feeds</li> </ul>	02	02	60	OFT - Effect of feeding urea treated paddy straw along with grain mixture on milk production in crossbred milch cows.
Cattle	- Mastitis	Educate farmers about improved management practices to avoid mastitis	Prevention and control of mastitis in high yielding milch cows	- Use of teat dips and milking methods	01	02	60	
Livestock	- Foot and mouth disease	Educate farmers about the disease prevention and economic losses involved in it	Prevention and control of foot and mouth disease in livestock	<ul><li>Use of disinfectants</li><li>Feeding methods</li></ul>	01	02	60	
Cattle	Under nutrition in calves	Educate farmers about feeding colostrums and milk to calves	Scientific method of calf rearing	- Feeding calves based on the body weight and use of milk replacers.	01	02	60	

1	2	3	4	5	6	7	8	9
Livestock	Low quality feeding stuffs	To show the importance of enrichment of low quality feeding stuffs	Enrichment of low quality feeding stuffs with NPN substances	Treating roughages with NPN substances	01	02	60	OFT - Effect of feeding urea treated paddy straw along with grain mixture on milk production in crossbred milch cows.
Nutrition education	-Malnutrition -Less knowledge and adoptability	<ul> <li>To create awareness on nutritional security</li> <li>To reduce morbidity among children because of PEM</li> </ul>	Importance of early childhood nutrition to achieve nutritional security among children	Preparation of ragi based, nutritionally enriched weaning mixes	01	04	60	OFT- Impact of Ragi malt on physical and mental status of preschoolers OFT - Impact of composite flour on nutritional status of adolescent girls
Drudgery reducing implements	Energy, time and labour consumption	To reduce energy, time and labour consumption and cost of cultivation	Awareness on improved drudgery reducing implements	Demonstration of weeders	01	03	45	OFT- Assessment of weeders as drudgery reducing implements in maize, ragi, sugarcane and pulses
Post harvest technology	Post harvest loss	To reduce post harvest losses due to bruchid infestation	Safe storage of pulses	<ul> <li>Proper sun drying to achieve 8-9% moisture content</li> <li>Storing in air tight containers and spreading 3 cm fine sand on grains</li> </ul>	02	02	40	FLD - Scientific storage of pulses

1	2	3	4	5	6	7	8	9
Income generating activities	Non utilization of spare time by farm women	Effective utilization of spare time for income generation	Income generating activities for farm women	<ul> <li>Preparation of agarbatti, soap powder, liquid soap, phenyl</li> <li>Utilization of waste clothes for preparation of quilt and footmats</li> </ul>	02	02	60	
Post Harvest Technology	Energy, time and labour consuming Mechanical shelling of groundnut pods causes damage of seeds	- To reduce energy, time and labour consuming for stripping and shelling - To reduce damage of seeds	Use of groundnut stripper and decorticator	- Demonstration of groundnut stripper and decorticator	01	02	30	

# 5.b. Plan of training programmes for rural youth during 2008-09

Crop / Enterprise	Major problem	Objective of training programme	Training Title	Skill component involved	Duration	No. of Courses	Number of participants	Specify FLD/OFT in relation the programme
1	2	3	4	5	6	7	8	9
Vermi composting	- Soil health -Thrash burning	Recycling of agricultural waste to organic manure	Production technology of vermin compost through different methods	<ul><li>Filling up of the waste material</li><li>Harvesting of manure</li></ul>	06	02	50	OFT- Integrated nutrient management
Vegetable crops	- Lack of good quality planting materials.	Create awareness on improved methods of seedlings production	Methods of raising quality planting materials in vegetable crops	<ul><li>Raised seed bed method.</li><li>Poretray nursery.</li></ul>	03	02	100	
Kitchen gardening	- Imbalance nutritional diet	Educate rural youths about balanced nutrition.	Nutritional gardening.	- Layout of the garden.	02	04	200	
Poultry	- Lower body weight gain in poultry and increased cost of production of meat/egg.	Educate farmers about importance of Giriraja poultry birds rearing in backyard free range conditions.	Giriraja and Girirani poultry birds rearing in backyard as a source of subsidiary income for poor	- Effective utilization of kitchen waste.	03	02	60	FLD – Giriraja and Girirani poultry birds rearing in backyard free range conditions
Sheep and goat	- Lower body weight gain in sheep and goat	Educate farmers about feeding concentrates in improving the body weight	Rearing sheep and goat as a source of subsidiary income for poor	- Preparation of home made feeds	03	02	60	

1	2	3	4	5	6	7	8	9
Cattle	Infertility problem in cattle	Educate farmers about the advantages of artificial insemination	Artificial insemination and its importance in cattle	- Thawing of semen straw - Use of AI gun - Depositing semen in right area	03	02	60	
Nutrition education	Prevalence of anemia among adolescent girls	To achieve nutritional security	Importance of balanced diet during adolescent period	Preparation of composite flour mixes	01	02	30	OFT- Impact of composite flour on nutritional status of adolescent girls

# **5c.** Plan for Training Programmes for Extension Functionaries during 2008-09

Crop / Enterprise	Major problem	Objective of training programme	Training Title	Skill component involved	Duration	No. of Courses	Number of participants	Specify FLD/OFT in relation the programme
1	2	3	4	5	6	7	8	9
Cotton	<ul> <li>No RDF</li> <li>Sucking pest</li> <li>Boll worms</li> <li>Leaf reddening and square drying</li> </ul>	ICM	Recent advances in production technology	<ul> <li>Seed treatment</li> <li>Sowing technique</li> <li>Pheromone trap installation</li> <li>Micronutrient spray</li> <li>Use of power weeder</li> </ul>	02	01	25	FLD – Integrated Crop Management
Coconut	Black Headed Catterpiller Incidence.	Educate them about methods of controlling BHC.	Integrated Management of BHC in Coconut.	- Root feeding with monocrotophos - Release of paracite Goniozus nephentidis	03	04	250	Integrated Management of BHC in Coconut.
Cattle	Low quality milk production	Educate extension functionaries about the importance of clean milk production	Quality clean milk production	Milking methods	01	02	60	

1	2	3	4	5	6	7	8	9
Value addition	<ul> <li>Malnutrition among preschoolers</li> <li>Anemia among adolescent girls</li> </ul>	To achieve nutritional security	Nutrition education	- Preparation of different weaning and composite flour mixes	02	02	40	OFT- Impact of Ragi malt on physical and mental status of preschoolers OFT - Impact of composite flour on nutritional status of adolescent girls
Fisheries	- Low fish production per unit area (0.5 to 0.8 t per ha) - Incomplete technical knowhow of aquaculture technology	To popularize the inland polyculture of fishes and integrated aquaculture for improved farm income.	-Sustainable integrated fish aquaculture in inland ponds - Fish farm management	- Pond construction - Pond preparation - Seed selection and stocking density - Seed rearing - Feed formulation and management - Fertilizer management - Health management - Integration of other agriculture activities around pond	02	01	15	FLD - Popularization of pond integrated aquaculture with fish polyculture

# 5d. Plan of Vocational training programmes for Young Farmers (Rural Youth) during 2008-09

Crop / Enterprise	Major problem	Objective of training programme	Training Title	Skill component involved	Duration	No. of Courses	Number of participants
Quality planting materials in Horticulture crops.	Lack of availability of quality planting materials	Demonstrate new techniques of seedling production.	Methods of raising quality planting materials in Horticulture crops	<ul><li>Raised seed bed method.</li><li>Poretray nursery.</li><li>Grafting, Budding and Layering technique.</li></ul>	10	02	100
Livestock	Increased cost of production of milk in dairy animals	Educate farmers about scientific dairy farming	Scientific dairy farming	<ul><li>Selection of cow</li><li>Feeding methods</li><li>Preparation of home made feeds</li></ul>	05	01	30
Livestock	Feeding concentrates low in protein and energy	Educate farmers about preparation of concentrate feeds as per BIS specifications	Preparation of balanced feeds through SHGs	- Blending of different feed raw materials	05	01	30
Mushroom cultivation	Low production	To increase production potentiality by use of quality seeds	Mushroom cultivation	<ul><li>Stuffing of paddy straw</li><li>Sowing of mushroom seeds</li><li>Water spraying</li></ul>	03	01	10
Fisheries	- Low fish production per unit area (0.5 to 0.8 t per ha) - Incomplete technical knowhow of aquaculture technology - Lower income per unit area	To popularize the inland polyculture of fishes and integrated aquaculture for improved farm income.	Sustainable integrated fish aquaculture in inland ponds - Aquaculture as a profitable entrepreneurship - Fish seed rearing - Fish farm management	<ul> <li>Pond construction</li> <li>Pond preparation</li> <li>Seed selection and stocking density</li> <li>Feed formulation and management</li> <li>Fertilizer management</li> <li>Health management</li> <li>Integration of other agriculture activities around pond</li> </ul>	7	01	25

# 5e. Plan for sponsored training programme during 2008-09

Crop / Enterprise	Major problem	Objective of programme	Training Title	Skill component involved	Duration	No. of Courses	Number of participants	Sponsoring Agency
Coconut	- Black Headed Catterpiller Incidence.	Educate them about methods of controlling BHC.	Integrated Management of BHC in Coconut.	- Root feeding with monocrotophos - Release of paracite Goniozus nephentidis	03	04	250	KSDH, Davanagere.
Cattle	- Low and unhygienic milk production	Quality clean milk production	Quality clean milk production	- Milking methods - Use of teat dips	01	30	1000	Shimoga Milk Union Ltd. Shimoga

# **6.** Details of Extension Programmes planned for 2008-09

Month	Block & village/	Extension Programme	Specify FLD/OFT in relation to the	Expected number of participants			
	Cluster		programme	Farmers/Farm women/Rural youth	Extension Personnel	Total	
		<ul> <li>Field visit</li> <li>Group meeting</li> <li>Identification and selection of farmers</li> <li>Preliminary training and discussion</li> </ul>	FLDs	150	50	200	
	Chikkabantanahalli,	<ul> <li>Field visit</li> <li>Group meeting</li> <li>Identification and selection of farmers</li> <li>Preliminary training and discussion</li> </ul>	FLDs and OFTs	150	25	175	
April	Budihal, Hodigere, Kandagal, Jigali, Davanagere Cluster	<ul> <li>Field visit</li> <li>Group meeting</li> <li>Identification and selection of farmers</li> <li>Preliminary training and discussion</li> </ul>	FLDs and OFTs	150	25	200	
		<ul> <li>Field visit</li> <li>Group meeting</li> <li>Identification and selection of farmers</li> <li>Preliminary training and discussion</li> </ul>	FLDs/OFTs	200	25	225	

	Jigali Cluster	<ul> <li>Group meeting</li> <li>Identification and selection of farmers</li> <li>Preliminary training and discussion</li> </ul>	FLDs and OFTs	150	25	175
	Davanagere cluster	<ul> <li>Field visit</li> <li>Group meeting</li> <li>Identification and selection of farmers</li> <li>Preliminary training and discussion</li> </ul>	FLDs and OFTs	200	50	250
May	Chikkabantanahalli cluster	<ul><li>Field visit</li><li>Method demonstrations</li><li>Trainings</li></ul>	FLDs	150	20	170
	Budihal Cluster	<ul><li>Field visit</li><li>Method demonstrations</li><li>Trainings</li></ul>	FLDs	140	25	165
	Hodigere Cluster	<ul><li>Field visit</li><li>Method demonstrations</li><li>Trainings</li></ul>	FLD	150	25	175
	Kandagal Cluster	<ul><li>Field visit</li><li>Method demonstrations</li><li>Trainings</li></ul>	FLD/OFT	150	20	170
May	Davanagere cluster	<ul><li>Training</li><li>Field visits</li><li>Seminar</li></ul>	FLDs and OFTs	150	25	175
	Jigali Cluster	<ul><li>Field visit</li><li>Method demonstrations</li><li>Training</li><li>Seminar</li></ul>	FLD/OFT	150	20	170

Field visit

	Davana ann Hadiann	<ul><li>Field visit</li><li>Method demonstrations</li><li>Training</li><li>Seminar</li></ul>	FLD/OFT			
June	Davanagere, Hodigere, Budihal, Chikkabantanahalli Kandagal Cluster	<ul> <li>Pond preparation</li> <li>Seed stocking</li> <li>Sowing of vegetable seeds on pond dykes</li> <li>Erection of poultry cages</li> </ul>	stocking ag of vegetable on pond dykes  FLD- Popularization of pond integrated aquaculture with fish polyculture		30	205
July	Davanagere cluster	<ul> <li>Vocational training</li> <li>Fertilization and feeding regime standardization, release of poultry birds</li> <li>Fish Farmers' Day</li> <li>Field visit</li> <li>Method demonstrations</li> <li>Training</li> <li>Seminar</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	25 rural youth 150	40	215
August	Channagiri, Davanagere, Harihar	<ul> <li>Training</li> <li>Monitoring of FLD ponds</li> <li>World Kitchen garden day</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	150	15	165
September	Channagiri, Davanagere, Harihar	<ul> <li>Sampling fish for weight,</li> <li>Feeding regime changed</li> <li>Field visit</li> <li>Method demonstrations</li> <li>Training</li> <li>Seminar</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	150	25	175
October	Channagiri, Davanagere, Harihar	<ul><li>Health management</li><li>Field visit</li><li>Method demonstrations</li><li>Training</li></ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture	125	25	150

		- Seminar	FLD/OFT			
November	Channagiri, Davanagere, Harihar	<ul> <li>Feeding regime changed</li> <li>Field visit</li> <li>Method demonstrations</li> <li>Training</li> <li>Seminar</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	140	25	165
December	Channagiri, Davanagere, Harihar	<ul> <li>Sampling fish for weight</li> <li>Field visit</li> <li>Method demonstrations</li> <li>Training</li> <li>Seminar</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	160	30	190
January	Channagiri, Davanagere, Harihar	<ul> <li>Partial harvesting</li> <li>Field day</li> <li>Field visit</li> <li>Method demonstrations</li> <li>Training</li> <li>Seminar</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	175	30	205

February	Channagiri, Davanagere, Harihar	<ul> <li>Complete harvesting</li> <li>Field visit</li> <li>Method demonstrations</li> <li>Training</li> <li>Seminar</li> </ul>	FLD- Popularization of pond integrated aquaculture with fish polyculture FLD/OFT	125	25	150
March	Channagiri, Davanagere, Harihar	- Filed days, field visit	FLD/OFT	100	50	150

## 7.Details of Seeds / Planting Material/ Livestock / Bioproducts to be produced during 2008-09

	Production and supply of seed materials Cereals			
	Cereals			1
]	Cercais			
	Oilseeds			
7	Pulses			
	Vegetables	Onion	Arka Kalyan	25 kg
]	Flower crops			
	Others (Specify)			
2 ]	Production and supply of Planting materials			
		Mango	Alphanso	1000 No.
	Fruits	Sapota	Cricket ball/ Kalipatti	1000 No.
	Spices			
	Vegetables	Drumstick	PKM-1/ Dhanraj	5000 No.
]	Forest species			
	Ornamental crops			
j	Plantation crops	Arecanut	Thirthahalli Local	2000 No.
		Coconut	Arsikere tall	500 No.
	Others (Specify)			
3 ]	Production and supply of bio-products			
	Bio agents			
	Bio fertilizers			
]	Bio pesticides			

4	Production and supply of livestock material			
	Cattle	Milk		12000 ltr
	Sheep	Meat	Bellary	250-300 kg
	Goat			
	Fisheries	Ornamental fishes	Guppy, Gambusia, Molly, Sword tail	5000 No.
	Others (Specify)			

## 8. Activities of soil, water and plant testing laboratory

Year of establishment	Expenditure (Rs. in lakh)	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

## 9. Details of process documentation planned for 2008-09 in relation to output, outcome and impact

	Sl. No.	Title of document	<b>Expected date of submission</b>
	1	ICM in cotton – Rejuvenated crop story in Davanagere district	December 2008
Ī	2	Taralabalu Nutritive Malt – Rural energy source for women and children	March 2009

# 10. Details of print media coverage planned for 2008-09

Sl. No.	Nature of literature/publications and no. of copies	Proposed title of the publication
1	Leaflet/folder (1000 copies)	<ul> <li>INM in Arecanut, Coconut and Banana</li> <li>Production technology of important medicinal plants</li> <li>Dry land Horticulture.</li> <li>Purple blotch management in Onion.</li> <li>Enrichment of low quality feeding stuffs.</li> <li>Safe storage of pulses.</li> <li>Weaning mixes for nutritional security and income generation.</li> <li>Aerobic cultivation of Paddy.</li> <li>INM in Paddy, Maize.</li> <li>Production technology in Soyabean.</li> <li>Production technology in Navane.</li> <li>Methods of vermicomposting production.</li> <li>Different methods of composting.</li> <li>Production technology in fodder crops.</li> <li>Advances in aquaculture technologies</li> <li>Fish seed rearing, a profitable venture for small farmers</li> <li>Portable carp plastic hatchery</li> <li>Ornamental fishes for control of mosquito menace</li> </ul>
2	Paper articles (Daily news paper)	<ul> <li>Tips to control mastitis in dairy animals</li> <li>Epidemic diseases and ornamental fishes in the context of Davanagere district</li> </ul>

# 11. Details of electronic media coverage planned for 2008-09

Sl. No.	Nature of media coverage	Proposed title of the programme to be telecasted/ broadcast	
1	Radio talk	- Scope and importance of medicinal and aromatic crops	
		- Dry land Horticulture.	
		- INM in Arecanut, Coconut and Banana.	
		- Balanced cattle feed preparation.	
		- Rearing Giriraja poultry birds in backyard.	
		- Value addition in field and horticulture crops.	
		- Bio cotton.	
		- Cotton production technology.	
		- Recycling of Sugarcane thrash.	
		- Advances in sustainable inland integrated fish farming	
		- Ornamental fishes as biological control measure for epidemic diseases	
2	TV Programmes	- Fodder crops and their nutritive value	
		- Azolla cultivation methods	
		- Cotton.	
		- Production technology in Navane.	
		- INM in Arecanut, Coconut and Banana.	
		- Management of pseudostem weevil in Banana.	
		- Management of BHC in Coconut.	
		- Advances in sustainable inland integrated fish farming in rural areas for	
		small farmers	

# 12. Nature of collaborative activities planned for 2008-09

Thrust area	Collaborative Organizations	Nature of activities*	No. of Activities
BHC in Coconut	KSDH, Davanagere	- Campaign - Seminar - Demonstration	04 02 10
Purple blotch management in Onion	KSDH, Davanagere	- Training - Workshop	02 02
INM in Arecanut, Coconut and Banana	KSDH, Davanagere	- Seminar - Workshop	06 06
Quality clean milk production	Shimoga Milk Union Ltd. Shimoga	- Training programme	30
Ornamental fishes as biological control agents for epidemic diseases	City Corporation of Davanagere	<ul> <li>Seminar</li> <li>Campaign</li> <li>Training for extension personnel</li> <li>Production of ornamental fishes</li> <li>Release of fish agents in strategically identified areas</li> <li>Monitoring of the selected areas for the establishment of released fishes</li> <li>Replenishment of fish stock</li> <li>Impact study</li> </ul>	

# 13. Activities proposed under Farmers Field School (FFS) – Detailed proposal is to be provided in the following format

Title of FFS

Problem definition

Main Objectives of FFS:

Scientific rationale of FFS:

The learning process involved in FFS:

Priorities of FFS:

Budget details:

#### 14. Schedule for creation of Database at KVK during 2008-09

S. No	Name of Database	Content of Database	<b>Expected date of Completion</b>
01	Resource inventory of the District	1. Nine fold classification of land	
		2. Number and size of operational holdings	
		3. Weather parameters of the district. (for a minimum period of ten years)	
		4. Details of soil profile	
		5. Detailed cropping pattern (for a minimum period of ten years)	
		6. Area, production and productivity of major crops	
		7. Details of livestock wealth in the district	
		8. Production and productivity of livestock produces	
		9. Area under irrigation from different sources	
		10. Seasonal availability of labour	
		11. Trend in wholesale price of major crop and livestock	
		products (for a minimum period of ten years)	
		12. Details on input agencies	
		13. Details on infrastructural facilities available for production,	
		post harvest and marketing	
		14. Details of institutional credit facilities	
		15. Any others relevant to district	

Data requ	Oata required since inception of the KVK					
1.	Farmers Database	Details of farmers				
2.	<b>Technology Inventory for the District</b>	Details of suitable technologies for a district with their details				
3.	Database for Technologies assessed and	Technologies taken up for assessment and refinement with their				
	Refined	attributes				
4.	Frontline Demonstrations Database	Details of crops and enterprises along with technologies identified				
		for demonstration				
5.	Training Database	Details of training programmes across all categories and types of				
		participants				
6.	<b>Database of Extension Programmes</b>	Details of extension activities conducted with types of participants				
7.	Seeds and Planting Material Database	Details of crops along with varieties produced and sold				
8.	KVK Inventory of Assets	Details of inventories including all assets explaining year of				
		purchase, present condition etc.				
9.	KVK Accounts Database	Various accounts along with their sanction, expenditure etc.				

15. Are there any activities planned for production and supply (Either buy back or directly farmer to farmer) of seeds/ planting material/Boo-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	Planned for production of, fodder crops seedlings/seeds in about 1 acre of land		50,000 cuttings
	Fish seeds – production of <b>ornamental fishes</b> in a selected village self help affinity group	Village Self help Affinity Group with City Corporation through TKVK	10,000 No. of fishes

16. 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 2008-09. Please give details.

Sl. No	Name of activity	Extent of coverage's		
		No. of farmers	Area (ha)	
1.	Dry land Horticulture	50	50	

<sup>\*</sup>Individual /SHGs/farmers' Associations/Corporate/Institutions/Private agencies etc.

- 17. 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 2008-09
- 18. Whether ATMA is functioning in your district? YES

If yes, what type of coordination and collaboration does your KVK is proposed to have during 2008-09?

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

Yes / No

- 19. What type of Scientist-Farmer linkages are proposed by your KVK for 2008-09?
- 20. Please give details of activities planned, other than those listed above.
  - Organizing exposure visits to farmers / farm women and rural youths in establishing dairy unit and fodder demo plots.

# **III. ACTION PLAN FOR FARM ACTIVITIES**

#### 1. Financial status of revolving fund and plan for its utilization

Opening balance as on 01.04.2007	Expenditure incurred during 2007-08	Receipts during 2007-08	Closing balance as on 31.03.2008	Proposed expenditure during 2008-09	Proposed receipts during 2008-09
55361.07	285642.78	272178.03	41896.32	2,72,500-00	4,58,500-00

#### 2. Physical status of revolving fund and plan for its utilization

Opening stock position of materials* as on 01.04.2007	Quantity produced during 2007-08	Quantity sold during 2007-08	Closing stock position as on 31.03.2008	Expected production during 2008-09	Expected number of beneficiaries
	Vegetable				
	Tomato-316 kg	316 kg			
	Chilli - 130 kg	130 kg			
	Brinjial -100kg	100kg			
	Sugar cane				
	Seed prodction -9t	9t		15t	20 farmers and FLD
	Commerical -108.782t		108.782t	90 t	
	Paddy				
	(8.88 q)	8.88 q		25 q	
	<b>Cotton</b> (4.5 q)	4.50 q		10 q	
	<b>Maize</b> (172 q)	172 q		150 q	
	<b>Fish</b> (18000 fingerlings)	18000 fingerlings			FLD
	Redgram (1.5 q)	1.5 q			25 farmers

## 3. Plan for utilization of Revolving Fund (2008-09)

Amount to be invested (Rs.)	Purpose	Expected production	Approximate value of the produce
40,000-00	Maize	150 q	75,000-00
5,000-00	Cotton	10 q	20,000-00
15,000-00	Paddy	50 q	30,000-00
60,000-00	Sugarcane ratoon	90 t	76,500-00
25,000-00	Sugarcane COVC-2003-165	35 t	40,000-00
10,000-00	Fodder crops		50,000-00
90,000-00	Dairy animals (milch)	50 lit /day	1,08,000-00
10,000-00	Vermicompost	10 t	20,000-00
10,000-00	Nursery		25,000-00
5,000-00	Fisheries	-	10,000-00
2,500-00	Soil testing using mobile kit	50 samples	4,000-00
2,72,500-00			4,58,500-00

## 4. STATUS OF KVK FARM AND DEMONSTRATION UNITS

No. of blocks	Area	Source of	Season	Crop	Size	Expected output	
No. of blocks	(Ac)	irrigation	Season	/enterprise/ demonstration units	(no. of units/area) Ac	Quantity	Value (Rs.)
2	1.20	Bore well	Kharif /Rabi	Sugarcane ratoon (CO 86032)	1.20	45 t	38,250/-
1	1.20	Bore well	Kharif	Sugarcane ratoon (CO 7804)	1.20	45 t	38,250/-
3	10.0	Rainfed / Bore well	Kharif	Maize (Hybrids)	10.0	150 q	82,500/-
1	2.0	Bore well	Kharif	Paddy	2.0	50 q	30,000/-
1	2.0	Rainfed / Bore well	Kharif / Rabi	Cotton	2.0	10 q	20,000/-
2	3.0	Rainfed / Bore well	Rabi	Maize	3.0	40 q	25,000/-
	2 units	Bore well	April 07- March 08	Vermicompost		5 t	10,000/-
	1.0	Bore well	April 07- March 08	Soil Testing using Mobile kit		50 Samples	4,000/-
1	2.0	Bore well	Kharif	Fodder crops cultivation	2.0	100 t	50,000/-
1	0.2	Bore well	Kharif/Rabi	Grapes unit	0.2		
1	0.2	Bore well	Kharif/Rabi	Drumstick (PKM-1)	0.2	1000 No.	2000/-
1	5.0	Bore well		Mango orchard	5.0	5 q	5000/-

# IV. PLAN FOR FINANCIAL MANAGEMENT

Table 26. Details of Budget utilization (2007-08) and Proposed during 2008-09

CI			2007-08		2008-09
Sl. No.	Particulars	Sanc- tioned	Released	Expenditure	Budget Proposed
A. Re	curring Contingencies	l		<u> </u>	
1	Pay & Allowances	3000000	2918665	2369343.00	5412287
2	Traveling allowances	100000	100000	99810.40	150000
3	Contingencies	l		l	
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	217000	217000	216999.40	300000
В	POL, repair of vehicles, tractor and equipments	140000	140000	139995.83	200000
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	91000	91000	84722.00	130000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	84000	84000	78845.00	120000
Е	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	88000	88000	66898.50	150000
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	42000	42000	27330.00	100000
G	Training of extension functionaries	28000	28000	3360.00	30000
Н	Maintenance of buildings				50000
I	Library	10000	10000	8151.00	10000
J	Maintenance of Demonstration Units (Inland Aquaculture, Fish Portable Plastic Carp Hatchery, STL, Green House, Bio-Control Agent Prod. Lab., Bio Fertilizer Unit)				1214000
	TOTAL (A)	3800000	3718665	3095455.13	7866287

#### Table 26. (Continued)

Sl.		2007-08			2008-09
No.	Particulars	Sanc-	Released	Expenditure	Budget Proposed
D Ma	tioned				
B. No	on-Recurring Contingencies				
1	Works (Please Specify)				11800000
	i) Compound Wall, 8' height for 20 Acres of Land				3500000
	ii) Rain Harvest Structure				300000
	iii) Over Head Tank				1000000
	iv) Drainage System				4000000
	v) Roads (1800 m) including Embarkment				2400000
	vi) Solar Lighting and Water System for the Campus				600000
	vii) Administrative, Farmers Hostel & Staff Quarters Buildings.	2776000	2776000	2776000	
2	Vehicles				342000
3	Farm Development				2300000
4	Agricultural Equipments				1977000
5	Office Equipments				760000
6	A.V. Aids				602500
7	Furniture/Fixture / Fittings	500000	500000	500000	838320
8	Library Establishment				20000
9	Establishment of Demonstration Units (Dairy, Sericulture, Inland Aquaculture, Portable Fish Hatchery, STL, Green House, Bio Control Lab, Bio Fertilizer Unit)				5325640
TOT	AL (B)	3276000	3276000	3276000	23965460
C. RI	EVOLVING FUND				
GRA	GRAND TOTAL (A+B+C)		6994665	6371455.13	31831747

## SUMMARY OF TARGETS SET FOR NUMBER OF INTERVENTIONS TO BE IMPLEMENTED DURING 2008-09

S. No	Particulars of intervention	Target		
5. 110	Particulars of intervention	No. of technologies	Number of Trials	
01	Technologies to be assessed			
1.	Integrated Nutrient Management in Maize	02	05	
2.	Application of TNAU Coconut tonic in Coconut	02	05	
3.	Enrichment of fodder crop with urea	02	10	
4.	Use of leguminous fodder crops in relation for reducing the feeding cost in milk production	02	10	
5.	Assessment of weeds as drudgery reducing implements in maize, ragi, sugarcane & pulses	03	10	
6.	Impact of Ragi malt on physical and mental status of preschoolers	02	20	
7.	Impact of composite flour on nutritional status of adolescent girls	01	10	
02	Technologies to be refined			
03	Front Line Demonstration	Area(ha)	Number of Demonstrations	
	Oilseeds			
	• Groundnut (Kharif) - ICM and popularization of disease resistant variety (GPBD-4)	05	11	
	• Groundnut (Rabi/Summer) - ICM and popularization of disease resistant variety (GPBD-	05	12	
	4)	05	11	
	• Sunflower (Kharif) - ICM and introduction of KBSH-53	05	10	
	• Sunflower (Rabi/Summer) - ICM and introduction of KBSH-53			
	Pulses			
	• Redgram (Kharirf) - popularization of and IPM in BRG-2	05	10	
	Bengalgram – ICM and introduction of JJ-11	10	25	
	• Soybeanflower	05	12	
	Cereal Crops			
	Maize - Popularization and nutrient management in Maize hybrid (NAH-2049)	15	36	
	• Paddy - Introduction and popularization of high yielding variety (TANU-KMP-101)	05	12	
	• Ragi - Popularization of high yielding variety (GPU-28)	20	20	
	• Navane - Popularization of high yielding variety (RS-118)	05	10	
	Horticultural Crops			
	Application of Banana special	01	05	
	Popularization of variety Arka kalyan	02	10	

	Plantation Crops		
	• Integrated management of BHC in Coconut	20	50
	• Integrated Nutrient Management in Arecanut	20	50
	Commercial Crops		
	• Popularization of wooly aphid resistant variety (CO-VC-2003-165)	02	05
	Integrated Crop Management in Cotton	20	50
	Enterprises		
	Giriraja and Girirani poultry birds rearing in backyard free range conditions	10	10
	Feeding concentrates to sheep	10	10
	Scientific storage of pulses	20	20
	• Utilization of quality mushroom seeds for better yield	05	05
	Sustainable integrated inland fish farming	10	10
04	Training Programmes	Number of Courses	Number of Participants
	Farmers and farm women	08	2572
	Rural Youth	16	562
	Extension personnel	10	390
	Vocational programmes	06	195
	Sponsored programmes	34	1250
05	Extension Programmes	Number of Programmes	Number of Participants
	• Gram saba / visit to Gram panchayath		
	• Identification and selection of farmers		
	Preliminary field visit / Group discussion		
	• Trainings		
	Method demonstrations		
	• Field visits		
	• Field days		
	• Agri– Vety camps		
	• Farmers meet / Seminars		
	Agriculture exhibitions		
	National days celebrations		
	• Film shows		
	Radio programmes		
	• TV- programmes		
	o i v programmes		

C N	D (* 1 6* 4 (*	Target			
S. No	Particulars of intervention	Quantity (kg) / Number	Number of Farmers		
06	Production and supply of seed materials				
	Cereals				
	Oilseeds				
	Pulses				
	Vegetables - Onion	25 kg	50		
	Flower crops				
	Others (Specify)				
07	Production and supply of planting materials				
	Fruits – Mango, Sapota	2000 No.	100		
	Spices				
	Vegetables - Drumstick	5000 No.	200		
	Forest species				
	Ornamental crops				
	Plantation crops – Arecanut, Coconut	2500 No.	250		
	Others (Specify)				
08	Production and supply of bio-products				
	Bio agents				
	Bio fertilizers				
	Bio pesticides				
09	Production and supply of livestock material				
	Cattle – Milk	12000 L			
	Sheep – Meat	250-300 kg			
	Goat				
	Fisheries	5000 No.			
	Others (Specify)				
		Number	Number of Farmers		
07	Number of soil samples to be analyzed				
08	Number of water samples to be analyzed				
09	Number of plant samples to be analyzed				