## ICAR-KRISHI VIGYAN KENDRA, DAVANAGERE

# **ACTION PLAN OF KVK, DAVANAGERE FOR 2016-17**

#### 1. General information about the Krishi Vigyan Kendra

1.1	Name and address of KVK with Phone,	:	ICAR- Krishi Vigyan Kendra		
	Fax and e-mail		Kadalivana, LIC Colony Layout, BIET College Road,		
			DAVANAGERE-577004, Karnataka		
			Phone : 08192-263462, Fax : 08192-260969		
			E-Mail : <u>dvgtkvk@yahoo.com</u>		
1.2	Name and address of host organization	: Taralabalu Rural Development Foundation			
			SIRIGRE-577541, Chitradurga District		
1.3	Year of sanction	:	2004-05		
1.4	Website address of KVK and date of last update		Website : taralabalukvk.com		

#### 2. Details of staff as on date

				If Permanent, Please	indicate		If Temporary,
Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Current Pay Band	Current Grade Pay	Date of joining	pl. indicate the consolidated amount paid (Rs./month)
2.1	Senior Scientist-Cum-Head	Dr.Devaraja T N	Fishery	37400-67000 PB-4	9000	17-05-2005	Permanent
2.2	Subject Matter Specialist	Mr.Basavanagowda M G	Horticulture	15600-39100 PB-3	5400	21-11-2006	Permanent
2.3	Subject Matter Specialist	Mr.Mallikarjuna B O	Agronomy	15600-39100 PB-3	5400	09-01-2008	Permanent
2.4	Subject Matter Specialist	Dr.Jayadevappa G K	Animal Science	15600-39100 PB-3	5400	29-01-2008	Permanent
2.5	Subject Matter Specialist	Mr.Raghuraja J	Agri. Extn.	15600-39100 PB-3	5400	23-06-2008	Permanent
2.6	Subject Matter Specialist	Mr.Prasannakumar N	Plant Protection	15600-39100 PB-3	5400	24-06-2008	Permanent
2.7	Subject Matter Specialist	Mr.HM Sannagoudra	Soil Science	15600-39100 PB-3	5400	01-07-2013	Permanent
2.8	Programme Assistant	Mr.Revanasiddappa G B P	Lab.Technician	9300-34800 PB-2	4200	11-04-2012	Permanent
2.9	Computer Programmer	Mr.Santhosh B	Computer	9300-34800 PB-2	4200	05-09-2008	Permanent
2.10	Farm Manager	Mr.Vijayakumar S B	Farm Manager	9300-34800 PB-2	4200	23-06-2008	Permanent
2.11	Accountant/Superintendent	Mr.Mallikarjuna S Gudihindala	Administration	9300-34800 PB-2	4200	01-06-2005	Permanent
2.12	Stenographer	Smt Mamatha H Melmalagi	Administration	5200-20200 PB-1	2400	27-06-2005	Permanent
2.13	Driver 1	Mr.Marulasiddaiah NM	Jeep	5200-20200 PB-1	2000	01-06-2005	Permanent
2.14	Driver 2	Mr.Shivakumar S	Tractor	5200-20200 PB-1	2000	01-06-2005	Permanent
2.15	Supporting staff 1	Mr.Shivakumar B	Office Attendant	5200-20200 PB-1	1800	01-06-2005	Permanent
2.16	Supporting staff 2	Mr.Shivakumar S E	Farm Attendant	5200-20200 PB-1	1800	01-06-2005	Permanent

#### 3. Details of SAC meeting conducted during 2015-16

SI. No	Date	Major recommendations	Status of action taken in brief	Tentative date of SAC meeting proposed during 2016-17
1	2	3	4	5
3.1	15-12-2015	Group-I: To be addressed at KVK level		December – 2016
		Popularize safe ripening technology in Banana.		
		Popularize urea treated fodder enrichment technology.		
		Interventions on soil fertility improvement like crop rotation, green manuring etc.		
		Offer farm advisories/solutions/recommendations through a flag to the farmer fields affected by pests/diseases if come across on the way during the field.		
		Collect observations and data on component wise in IFS demonstrations.		
		Document data on performance of technology products purchased from KVK.		
		Provide feed-back (socio-economic and technical constraints) on technological interventions of KVK especially results on OFTs/FLDs to the respective source organization.		
		Disseminate information on various schemes implemented by state department of agriculture, horticulture, engineering, fisheries, animal husbandry etc in the form of leaflet among KVK clientele.		
		Prepare Compendium on OFT's and FLD's carried out by KVK since its inception.	On going	
		Arrange visits for farmers of other villages in the district of Davanagere to NICRA Project village.		
		Promote Azolla production using rain water rather than bore well or from other sources.		
		<b>Group-II : To be addressed through action plan of KVK for the year 2016-17</b> Take up ICM in Redgram.		
		Introduce suitable intercrop in sole Banana crop and Arecanut gardens.		
		Suitable intervention to promote millet crops in the district.		
		Intervention on mechanization and aerobic method in Paddy for selected farmers.		
		Issue soil health cards.		
		Involve in carrying suitable home science activities especially for Women Self Help Groups through SMSs (Home Science) from neighboring KVKs.		
		Address anabe roaga and stem bleeding in Coconut and Arecanut.		

1	2	3	4	5
3.1		Promote dry banana technology.		
		Increase technological interventions under crops like Maize, Finger millet, Jowar, Pulses,		
		Oilseeds crops.		
		Take up integrated methods to control ticks.		
		Group-III : To be addressed through convergence with line Departments in Davanagare district		
		Promote Floriculture, Green house and Polyhouse technologies.		
		Use media (Radio and TV) more for quick dissemination of technology information among		
		farmers, stakenoiders and intended clientele.		
		Provide information on marketing aspects to farmers and if possible involve personnel from		
		marketing agencies (APMC).		
		Promote solar energy in agriculture especially in bore wells to address electricity problems.		
		Encourage participatory approaches like FPO's instead of individual farmer benefit.	On going	
		Optimum use of artificial insemination technology.		
		Develop CHC in Siddanuru village with the help of line departments.		
		Popularize terrace garden through trainings under line departments.		
		Demonstrate onion drill sowing machine technology with the help of line departments.		
		Promote crop rotation in polyhouses sanctioned/implemented under line departments.		
		Introduce appropriate IIHR technologies under horticulture crops in Davanagere district.		
		Replicate AIR, Mysore and NABARD programme "ಮರಳಿ ಬಾ ಮಣ್ಣಿಗೆ" (Get back to the roots)		
		in Davanagere.		
		Promote Apiculture on EDP mode through vocational training sponsored by line departments.		

#### 4. Capacity Building of KVK Staff

#### 4.1. Plan of Human Resource Development of KVK personnel during 2016-17

S. No	New Areas of Training	Institution proposed to attend	Justification
4.1.1	Improved production technology in pulse	ICAR	International pulse year and pulse productivity is
	production		very low, to increase its production and productivity
4.1.2	Climate Resilient Management techniques under	ICRISAT, Hyderabad	KVK comes under central dry zone and NICRA
	dry land agriculture		activities are going on and required to upgrade
			knowledge.
4.1.3	Advanced level training in soil testing	Indian Agricultural Research Institute,	To strengthen soil and water testing laboratory
		New Delhi	
4.1.4	IPDM in oilseed and pulses	DOR, Hyderabad	To know knowledge about IPDM practices
4.1.5	Strategies for Promoting Farmers producer	National Academy of Agriculture	To get more knowledge on management strategies
	Organization	Research Management (NAARM),	for newly formed FPO's of the district.
		Hyderabad	
4.1.6	Changing Methodological Paradigm in Extension	ICAR under CAFT programmes	To conduct impact studies of KVK activities using
	Research		appropriate statistical tools to draw meaningful
			conclusions.
4.1.7	Managerial skills for convergence in agricultural	MANAGE, Hyderabad	For better KVK management.
	extension		

#### 4.2. Cross-learning across KVKs during 2016-17

S. No		Name of the KVK proposed	Specific learning areas	
4.2.1	Within ring Krishi Vigyan Kendra, Hassan		Animal science activities, Soil Science	
	Krishi Vigyan Kendra, Kodagu		Documentation, Horticulture activities, Animal science activities	
	Krishi Vigyan Kendra, Shimoga		Protected cultivation of vegetables	
4.2.2	Within the zone Krishi Vigyan Kendra, Pattanamthitta		Secondary Agriculture and Animal Science activities	
	Krishi Vigyan Kendra, Erode, & Krishi Vigyan		SHG activities, Precision farming	
		Kendra, Pondicherry		
4.2.3	Outside zone	Krishi Vigyan Kendra, West Godavari	NICRA Activities	

S.No.	Name of the KVKs included in the cluster	What do you intend to share with Cluster KVKs	What do you expect from Cluster KVKs
5.1	KVK Shivamogga	Fish seeds, Fodder slips	Seeds, Seedlings, Farm Machinery and secondary
			agriculture
5.2	KVK Tumkur	NICRA activities	Seeds / Seedlings, NICRA activities
5.3	KVK Chitradurga	Banana special, Animal science expertise	Pulses technologies, Soil Science activities

5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities during 2016-17

#### 6. Operational areas details proposed during 2016-17

S.No.	Major crops & enterprises being practiced in cluster	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by	Names of Cluster Villages identified for	Proposed Intervention (OFT, FLD, Training,
	villages		the problem in the	intervention	extension activity etc.)*
			district		
1	2	3	4	5	6
6.1	Finger millet	<ul> <li>Low yield</li> <li>Non- availability of HYV</li> <li>No seed treatment with bio-</li> </ul>	5,000 ha	Chigateri Cluster Chigatere Kadabagere	<ul> <li>FLD</li> <li>Group discussion</li> <li>Training</li> </ul>
		fertilizers		Bennehalli Hunsehalli	<ul> <li>Field visit</li> <li>Field day</li> <li>Method Demonstration</li> </ul>
6.2	Foxtail millet (Navane)	<ul> <li>Low yield</li> <li>Non- availability of HYV</li> <li>No seed treatment with bio- fertilizers</li> </ul>	300 ha	<b>Chigateri Cluster</b> Chigateri Bennehalli	<ul> <li>OFT</li> <li>Group discussion</li> <li>Training</li> <li>Field visit</li> <li>Field day</li> <li>Method Demonstration</li> </ul>

1	2	3	4	5	6
6.3	Groundnut	• Low yield	5000 ha	Chigateri Cluster	• FLD
		• No seed treatment with Bio			Group discussion
		fertilizers			• Training
		• Non-availability of HY varieties.			• Field visit
		• Poor / Non availability of green			• Field day
		fodder.			
		• Improper nutrient management			
		• Tikka leaf spot, Root rot			
6.4	Bengal gram	• Low yield	7000ha	Chigateri Cluster	• FLD/OFT
		• No seed treatment with Bio		Kadabagere	Group discussion
		fertilizers		Chigateri	• Training
		• Non-availability of HY varieties.			• Field visit
		• Improper nutrient management			• Field day
		Pod borer, Wilt			
6.5	Field bean	• Low yield	500 ha	Kodaganur Cluster	• FLD
		• No seed treatment with Bio		Kodaganur	Group discussion
		fertilizers		Siddanuru	• Training
		• Non-availability of HY varieties.		Mayakonda	• Field visit
		Improper nutrient management			• Field day
		Pod borer			
6.6	Cotton	• Improper nutrient management	5500 ha	Bilichodu & Chigateri cluster:	• FLD
		Square dropping		Mushtooru, Kadabagere	• Training
		Leaf reddening			Diagnostic
		Improper spacing			Group discussion
		Sucking pest			• Field visit
					• Field day

1	2	3	4	5	6
6.7	Sorghum	Imbalanced nutrient	2000ha	Malligenahalli Cluster:	• FLD
		management		Dodderahalli	• Training
		Soil moisture stress			Diagnostic
		• Rust			Group discussion
		Stem borer			• Field visit
					• Field day
6.8	Black gram	Improper Nutrient	300 ha	Malligenahalli Cluster:	• FLD
	C	Management		Govinakovi	Training
		• Single crop per year			Diagnostic
		Mono cropping			Group discussion
		Micronutrient deficiency			• Field visit
					• Field day
6.9	Paddy	Low yield	20000	Kondajji Cluster	• FLD
		No seed treatment		Palmenahally	Group discussion
		• Incidence of blast, stem		chikabidare	• Training
		borer, sheath blight and		Saarathi	• Field visit
		brown plant hopper			Method Demonstration
					• Field day
6.10	Maize	• Low yield	25000	Kodaganur Cluster	• FLD
		• No seed treatment with		Haluvarthy	Group discussion
		biofertilizers		Mayakonda	• Training
		• Incidence of stem borer and		Yegne	• Field visit
		turcicum leaf blight			Method Demonstration
					Field day
6.11	Redgram	• Low yield	2000	Kodaganur Cluster	• FLD
		• No seed treatment with		Haluvarthy	Group discussion
		biofertilizers		Mayakonda	• Training
		Use of local varieties			• Field visit
		• Incidence of pod borer &			Method Demonstration
		wilt			• Field day
6.12	Sunflower	• Low yield	250	Chigatari Cluster	• FLD
		• No use of ZnSO <sub>4</sub> and boron		Mydur	Group discussion
		• Higher incidence of bud		Nandibevur tandya	Training
		necrosis and head borer			Field visit
		neerosis und neud corer			Method Demonstration
					• Field day

1	2	3	4	5	6
6.13	Banana	Low yield	425	Kodaganur Cluster:	• OFT
		Incidence of Banana Skipper		Halebisaleri	• Training
				Elebetur	Method Demonstration
					• Field visit
					• Field day
6.14	Mango	Low Yield	4168 ha	Santhebennur cluster:	• FLD
				Doddabbigere	• Training
					Method Demonstration
					Field visit
					• Field day
6.15	Onion	Low yield	5340 ha	Malligenahalli Cluster:	• FLD
				Belagutti	• OFT
				Rameshwara	Training
				Kadabagere Cluster:	Method Demonstration
				Hosakote	• Field day
6.16	Coconut	Mono cropping	2189 ha	Kodaganur Cluster:	• OFT
		• Non use of interspace		Shyagale	• Training
		Low income			Method Demonstration
					• Field day
6.17	China Aster	• Low yield potential of existing	28 ha	Kodaganur Cluster:	• FLD
		crops		Shyagale	• Training
		• Lesser area under cultivation			Method Demonstration
					• Field day
6.18	Marigold	• No remunerative flower crop	1047 ha	Malligenahalli Cluster:	• FLD
		for existing Areca gardens		Belagutti	• Training
				Rameshwara	Method Demonstration
					• Field day
6.19	Rearing Crossbred	• Low milk production, repeat		Kodaganur Cluster	• FLD
	Cattle and Buffaloes.	breeding & weakness in	>60,000 animals	Davanagere Taluk &	• Training
		Crossbred cattle.		Kuremaganahalli Cluster	• Extension activity.
		<ul> <li>Clean and Quality milk</li> </ul>		Harapanahalli Taluk	
		production.			

1	2	3	4	5	6
6.20	Rearing of Small Ruminants	• Lower body weight gain due	>3,00,000 animals	Chigateri Cluster	• FLD
	like Sheep & Goats.	to under nutrition and		Harapanahalli Taluk	Training
		parasitic infestation.			• Extension activity.
		Infectious and Contagious			
		diseases in small ruminants.			
6.21	Rearing of local poultry	• Lower body gain & Less	>1,50,000 birds	Kodaganur Cluster	• Training and Extension
	birds.	numbers of eggs in Poultry		Davanagere Taluk	activity.
		birds.			
6.22	Cultivation of Napier X	• Lower nutrients yield,	>500 hactares	Kodaganur Cluster	• OFT
	fodder varieties	Palatability is less at maturity		Davanagere Taluk	• FLD
		stage leading to rejection of			Training
		fodder, high content of oxalic			• Extension activity
		acid.			
6.23	Fisheries	• Low yield & income		Kodaganur Cluster	• FLD
				Davanagere taluk	• Training
					• Extension activity

## 7. Technology Assessment during 2016-17

S.	Crop/	Prioritized problem	Title of intervention	Technology options	Source of
No.	enterprise				Technology
7.1	Foxtail millet	<ul> <li>Low yielding varieties</li> </ul>	Assessment of foxtail	T1 : Farmer practices-Local variety	_
		• No seed treatment with	millet varieties for higher	(Bommanahalli local)	
		biofertlizers	yield under rainfed	T2: SIA-2644	UAS, Raichur
		• Susceptible to stress condition		Biofertilizers- Azospirillum, PSB and	
		• Susceptible to pest and diseases		VAM @ 500g	
		1 1		Foliar spray 19:19:19 at 40 DAS	
				T2: HMT-100-1	UAS, Dharawad
				Biofertilizers- Azospirillum, PSB and	
				VAM @ 500g	
				Foliar spray 19:19:19 at 40 DAS	

Name of critical	Qty	Cost per	No. of trials	Total cost for the	Parameters to be studied	Team members
input	per trial	trial		intervention		
				( <b>Rs.</b> )		
T1:- Local Variety			03		• Germination (%)	SMS (Agronomy,
(Bommanahalli local)					• Plant height (cm)	Plant Protection, Soil
T2: SIA-2644 seeds	4 kg	200-00	03	1440-00	• Panicle length (cm)	Science) & SSH
Azosprillum, PSB	1.5 kg	150-00			• Yield (g/ha)	
and VAM @ 4g/kg						
Foliar spray 19:19:19	1 kg	130-00				
at 40 DAS						
T3: HMT-101	4kg	200-00	03	1440-00		
Biofertilizers	1.5 kg	150-00				
Azospirillum, VAM						
and PSB @ 4g/kg						
Foliar spray 19:19:19	1 kg	130-00				
at 40 DAS						
		960-00		2880-00		

S.	Crop/	Prioritized problem	Title of intervention	Technology options	Source of
No.	enterprise				Technology
7.2	Bengalgram	• Low yielding varieties	Assessment of Bengalgram	T1: JG-11- Farmers' Practice	UAS(B)
		• No seed treatment with bio-	tolerance	T2: GBM – 32 variety (Wilt resistant,	UAS (R)
		fertilizers	tolerance	suitable for mechanical harvesting)	
		• W1lt		T3: JAKI – 9218 variety (Tolerant)	JNKVV &
				to wilt & drought),	ICRISAT, 2009

Name of critical	Qty	Cost per	No. of trials	Total cost for the	Parameters to be studied	Team members
input	per trial	trial		intervention (Rs.)		
T1: JG – 11 • Seeds • <i>Rhizobium</i> and PSB (500g + 500g)	13 kg 01 kg	845-00 100-00	03	4785-00	<ul> <li>No. of pod/plant</li> <li>100 seeds weight (Test weight)</li> <li>Wilt incidence (%)</li> </ul>	SMS (Agronomy, Plant Protection, Soil Science) and SS&H
• <i>Trichoderma</i> (4g/kg of seeds)	0.25 kg	50-00			• Yield (q/ha)	
<ul><li>Traps and Lure</li><li>Pulse magic</li></ul>	3 No. 01 kg	400-00 200-00				
T2: GBM-32 • Seeds • <i>Rhizobium</i> and PSB (500g + 500g)	13 kg 01 kg	845-00 100-00	03	4785-00		
• <i>Trichoderma</i> (4g/kg of seeds)	0.25 kg	50-00				
<ul><li>Traps and Lure</li><li>Pulse magic</li></ul>	3 No. 01 kg	400-00 200-00				
T3 : JAKI – 9218 • Seeds • <i>Rhizobium</i> & PSB (500g + 500g)	13 kg 01 kg	845-00 100-00	03	4785-00		
• <i>Trichoderma</i> (4g/kg of seeds)	0.25 kg	50-00				
Traps and Lures	3 No	400-00				
Pulse magic	01 kg	200-00				
		4785-00		14355-00		

S.	Crop/	Prioritized problem	Title of intervention	Technology options	Source of
No.	enterprise				Technology
7.3	Banana	Low Yield	Assessment of different	T <sub>1</sub> : Spraying with Chloropyriphos @ 2 ml /L	
			filolecules for Ballana	T <sub>2</sub> : Spraying with Flubediamide 480 SC	UAS (B) for Paddy
			Skipper management	@0.25ml/l	Leaf Folder
				T <sub>3</sub> : Spraying Chlorantraniliprole	KAU for Paddy Leaf
				(Coragen 18.5 SC) @ 0.3ml/l	Folder

Name of critical input	Qty	Cost per	No. of trials	Total cost for the	Parameters to be studied	Team members
	per trial	trial		intervention		
				( <b>Rs.</b> )		
T1: Farmers practice			03		• Larval mortality (%)	SMS (Plant
T2: Flubendiamide	25 ml	475-00	03	1425-00	• Freshly damaged leaves @	Protection,
T3: Chlorantraniliprole	30 ml	525-00	03	1575-00	15 & 30 DAS (%)	Horticulture) & SSH
(Coragen 18.5SC)						
Total		1000-00		3000-00		

No. of farmers: 03

No. of plants: 900

S.	Crop/	Prioritized problem	Title of intervention	Technology options	Source of
No.	enterprise				Technology
7.4	Coconut	Monocropping	Flowers as Intercrop in	T1: Monocropping (2 guntas)	
		<ul> <li>No appropriate use of space</li> <li>Low income</li> </ul>	additional income.	T2: Coconut + Marigold (2 guntas)	UHSB
				T3: Coconut + China Aster (2 guntas)	CPCRI
				T4: Coconut + Chrysanthamum	CPCRI
				(2 guntas)	

Name of critical input	Qty	Cost per	No. of trials	Total cost for the	Parameters to be studied	Team members
	per trial	trial		intervention (Rs.)		
T1: Farmers practice			02		Growth parameters	SMS(Horticulture,
T2: Marigold seedlings	1452	2904-00	02	5808-00	• No. of flowers	Plant Protection) &
T3: China aster seedlings	1452	2904-00	02	5808-00	• Weight of flowers/plant	SSH
T4: Chrysanthamum	1090	2190-00	02	4380-00	Economics	
seedlings						
Total		7998-00		15996-00		

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology
7.5	Onion	<ul> <li>Imbalanced nutrient management</li> </ul>	Role of sulphur in improving the	T <sub>1</sub> –Application of 100:75:20 kg N:P:K/ha along with FYM	Farmers practice
		<ul><li>Small bulb</li><li>Less pungency</li></ul>	productivity of onion	$T_2$ – RDF (125:50:125 Kg N:P:K/ha) along with FYM	UAS (B)
		I Brit		T3- RDF (125:50:125 Kg N:P:K/ha) along with FYM and 45kg sulphur through elemental sulphur	DOGR, Pune

Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
T <sub>1</sub> : Azospirillum	0.5 kg	50-00	5	500-00	• Size of the bulb	SMS (Soil Science,
PSB	0.5 kg	50-00			• Weight of bulb	Horticulture)
T <sub>2</sub> : Azospirillum	0.5 kg	50-00	5	500-00	• Yield	
PSB	0.5 kg	50-00				
T <sub>3</sub> : Azospirillum	0.5 kg	50-00	5	2750-00		
PSB	0.5 kg	50-00				
Elemental sulphur	10 kg	450-00				
Total		750-00		3750-00		

S.	Crop/	Prioritized problem	Title of intervention	Technology options	Source of
No.	enterprise				Technology
7.6	Dairying	Lower production	Assessment of benefits of	Feeding dairy animals with paddy	
		<ul> <li>Repeat breeding and Infertility</li> </ul>	feeding urea treated paddy	straw, brans and cakes.	
		problem in dairy animal.	straw along with grain	Feeding animals with Urea-treated	KVAFSU (Bidar)
			mixture on the performance	paddy straw, compounded feeds along	
			of dairy animals.	with ASMM	
				Feeding animals with Urea-treated	NIANP (B)
				paddy straw along with grain mixture,	
				compounded feeds ASMM, V&M	
				tonic	

Name of critical	Qty	Cost per	No. of trials	Total cost for the	Parameters to be studied	Team members
input	per trial	trial		intervention		
				( <b>Rs.</b> )		
T1: Farmers practice			05		Milk quality	SMS (Animal
T2:					• Animal health condition,	Science, Agricultural
Dewormer	3g x 2 No	120-00	05	2850-00	• Voluntary Intake of straw by	Extension) & SS&H
	-				the animal (Fodder wastage)	
Area specific Mineral	1 kg x 3 pkts	450-00				
Mix(ASMM)						
T3:	3g x 2 No	120-00				
Dewormer	-		05	5350-00		
Area specific Mineral	1 kg X 3 pkts	450-00				
Mix(ASMM)						
V&M tonic	1 L x 1 can	500-00				
Total		1640-00		8200-00		

8. Technology Refinement during 2016-17 - Nil

## 9. Frontline Demonstrations during 2016-17

#### 9.1 Cereal:

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of	Source of
No.		enterprise	problem		Hybrid or	the Hybrid	Technology
					Variety	or Variety	
1	Cereals	Paddy	Low Yield	Integrated crop management in paddy with	Variety	Kauvey	UAS,
				an emphasiss on IPDM practices.		sona	Bengaluru
				• Seed treatment with Carbendizim @ 4g/kg of			
				seed			
				• Soil application of <i>Azospirillum</i> , PSB and VAM			
				@ 2.5 kg			
				• Spraying with neem oil @ 3ml/l in nursery			
				• Clipping of seedlings during transplanting			
				• Leaving one row of gap for every 3-4 m of			
				transplanting.			
				• Removal of weeds around bunds and use of			
				recommended dose of fertilizers.			
				• Soil application of <i>Pseudomonas fluorescence</i>			
				@5kg/ha after 30DAS			
				• Installation of funnel traps @10/ha			
				• Drain out excess water immediately after notice			
				of pests.			
				• Need based spray with Trycyclazole,			
				Hexaconazole and Buprafezin			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for	Parameters to be	Team members
	Demo	Demo		the	studied	
				Demo (Rs.)		
Carbendizim	0.1 kg	50-00	10	8,500-00	• Soil test before and after	SMS (Plant Protection,
Azospirillum	1.0 kg	100-00			• % incidence blast, sheath	Agronomy, Agricultural
Pseudomonas	2 kg	200-00			blight, stem borer.	Extension, Soil Science)
Funnel traps	4 no s.	150-00			• BPH incidence (No./hill)	& SSH
Scirfo lures	8 no.s	150-00			• Yield (q/ha)	
Tricyclazole	100 gm	200-00				
		850-00		8,500-00		

S. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or	Name of the Hybrid or	Source of Technology
		· · · <b>I</b>	I ····		Variety	Variety	
2	Cereals	Maize	• Low Yield	<ul> <li>Integrated crop management in maize with an emphasis on IPDM practices.</li> <li>Seed treatment with <i>Azospirillum</i> and <i>Trichoderma harzianum</i> @ 0.5kg./ha seeds each</li> <li>Seed treatment with Imidachloprid 5ml/kg of seed</li> <li>Growing of legume as intercrop @ 5kg/ha</li> <li>Spray of atrazine 50 wp @2.5 kg/ha</li> <li>Collection and burning of infected plants</li> <li>Soil application of ZnSO<sub>4</sub>, FeSO<sub>4</sub> @ 25 kg each/ha and borax 5kg/ha</li> <li>Spray with Flubendiamide @ 0.1 ml ml/1 and Propiconozol @1ml/1 (0.25 1 /ha)</li> </ul>	Hybrid	Private	UAS, Bengaluru

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Azospirillum	0.2 kg	25-00	15	16,500-00	• Plant height (cm)	SMS (Plant Protection,
Trichoderma	0.2 kg	25-00			• No. of cobs/plant	Agronomy, Soil
harzianum					• Incidence of stem borer	Science, Agricultural
Redgram BRG-2	2 kg	200-00			and turcicum leaf blight	Extension) & SSH
Imidachloprid	50 ml	100-00			• Yield (g/ha)	
Flubendiamide	25 ml	400-00			(4)	
Propiconozol	0.25 L	350-00				
		1100-00		16,500-00		

## 9.2 Millets:

S.	Category	Crop/	Prioritized problem	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise			Hybrid or	Hybrid or	Technology
					Variety	Variety	
1	Millets	Finger millet	• Low yield	Demonstration of HYV	Variety	ML-365	UAS, Bengaluru
				Finger millet for delayed			
				sowing			
				• Short duration ML-365 variety.			
				• Seed treatment with bio			
				fertilizers Azosprillium, PSB,			
				VAM @ 3 kg			
				• Application of ZnSO <sub>4</sub> -3 kg			
				• Use of water soluble fertilizers			
				(at tillering stage) 19 all (1 kg)			
				• Enrichment of fodder with 2 %			
				urea.			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Seed	5 kg	250-00	25	17,500-00	• Plant height (cm)	SMS (Agronomy, PP)
Bio-fertilizers	3 kg	300-00			• No. tillers/hill	SS &H
Azoprillum, PSB VAM					• No. of fingers/ear	
19:19:19	1 kg	150-00			• Test weight (g)	
					• Yield (q/ha)	
					• Fodder yield (t/ha)	
		700-00		17,500-00		

S.	Category	Crop/	Prioritized problem	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise			Hybrid or	Hybrid or	Technology
					Variety	Variety	
2	Millets	Sorghum	Imbalanced	Integrated crop management	Variety	SPV-2217	UAS, Dharwad
			nutrient	in sorghum (SPV-2217).			
			management	• Seed treatment with			
			• Soil moisture stress	Azatobactor, VAM, PSB @			
			• Rust	200g/acre			
			Stem borer	• Seed treatment with			
				Imidachloprid @ 5 ml/kg of			
				seed.			
				• Spraying of 19:19:19 at 30DAS			
				(1kg/ acre)			
				• Application of ZnSO <sub>4</sub> –			
				5kg/acre			
				• Spraving of chlorpyriphos			
				20EC- @ 2ml/l			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Seeds SPV-2217	3 kg	150-00	10	15,100-00	• Size of the head (cm)	SMS (Soil Science,
Biofertilizers	3 kg	300-00			• Test weight (g)	Plant Protection,
19:19:19 spray	3 kg	360-00			• Yield (q/ha)	Agricultural Extension)
Chlorpyriphos	1 L	350-00				
Hexaconazole	500ml	350-00				
		1510-00		15,100-00		

## 9.3 Oilseeds:

S. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology
1	Oilseeds (NFSM)	Groundnut	• Low yield	<ul> <li>Integrated crop management in groundnut</li> <li>Use of HYV GPBD-4 @ 110 kg/ha</li> <li>Seed treatment with chlorpyriphos 15ml/kg of seeds (termites and root grub)</li> <li>Seed treatment and soil application with <i>Trichoderma</i> @ 4 g/kg of seed 2 kg/ha</li> <li>Seed treatment with Rhizobium, PSB @ 2 kg each /ha</li> <li>Spray with profenophos @ 2ml/liter of water</li> <li>Spray with confider @ 0.4ml/liter of water</li> </ul>	Variety	GPBD-4	UAS, Dharwad

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
GPBD-4 (pods)	40 kg	3400-00	05	21,500-00	• Plant Height (cm)	SMS (Agronomy, Plant
Chlorpyriphos	0.5 L	180-00			• No. of Pods/Plant	Protection, Soil Science)
Trichoderma	0.8 kg	80-00			• Viold (g/ba)	SS&H
Rhizobium, PSB (0.8kg	1.6 kg	160-00			• Tield $(q/lia)$	
each)	_				• Fodder yield (t/ha)	
Profenophos	0.50 L	280-00				
Confidor	0.08 L	200-00				
		4300-00		21,500-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
		_			Variety	Variety	
2	Oilseeds	Sunflower	Low Yield	Integrated crop management in	Hybrid	KBSH-53	UAS, Bengaluru
	(NFSM)			sunflower with emphases on IPDM			
				practices.			
				• Use of KBSH-53 @ 5kg/ha			
				• Seed treatment with Imidacloprid			
				60FS @ 5 gm/kg seeds and PSB 1.0			
				kg/ha			
				• Application of ZnSO <sub>4</sub> 10kg / ha			
				• Spray with boron 0.2% at the time of			
				flowering (1.0 kg/ha)			
				• Sowing with jowar / baira as border			
				crop 2-3 rows			
				• Removal of affected plants and weed			
				hosts around the plots			
				• Hand picking of grown up larvae and			
				destroying			
				• Spray with imidacloprid @0.3ml / 1 at			
				45 and 60 DAS against bud necrosis-			
				200ml/ha			
				• Spray with indaxicarb @ 0.3ml/l			
				against head borer- 200ml/ha			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
KBSH-53	2 kg	400-00	15	9,600-00	• Plant height (cm)	SMS (Plant Protection,
PSB	0.4 kg	40-00			• Head diameter (cm)	Agronomy, Agricultural
Imidacloprid	0.08 L	200-00			• Incidence of bud	Extension, Soil Science)
					necrosis and head borer	& SSH
					• Yield (q/ha)	
		640-00		9,600-00	-	

## 9.4 Pulses:

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of	
No.		enterprise	problem		Hybrid or	Hybrid or	Technology	
					Variety	Variety		
1	Pulses	Bengalgram	<ul> <li>Low yield</li> </ul>	Integrated crop management in	Variety	JAKI 9218	JNKVV &	ķ
	(NFSM)			bengalgram			ICRISAT	
				• Use of HYV JAKI-9218 @ 62.5				
				kg/ha				
				• Seed treatment with <i>Trichoderma</i>				
				@4gm/kg of seed				
				• Seed treatment and soil application of				
				Rhizobium, PSB and VAM @ 2.0 kg				
				each /ha				
				• Pulse Magic @ 5kg/ha (Peak				
				flowering and pod formation)				
				• Use of trap crop @ 5kg/ha				
				• Use of bird perches				
				• Use of pheromone traps @10/ha				
				• 1 <sup>st</sup> spray with ovicidal insecticides				
				profenophos @ 2 ml/l				

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
JAKI 9218 seeds	25 kg	1625-00	25	71,625-00	• No. of pods/plant	SMS (Agronomy,
Rhizobium, PSB,VAM					• Incidence of wilt and	Plant Protection, Soil
(0.8kg each)	2.4 kg	240-00			pod borer (%)	Science and Extension
Trichoderma	0.8 kg	80-00			• Test weight (g)	(SS&H)
Pulse magic	2 kg	400-00			• Yield (g/ha)	
Ha pheromone trap	4 No.	240-00			11010 (4110)	
Profenophos	0.5 L	280-00				
		2865-00		71,625-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
2	Pulses	Redgram	Low Yield	Integrated crop management in	Variety	BRG-5	UAS, Bengaluru
	(NFSM)			redgram			
				• Use of BRG-5 medium duration wilt			
				resistant variety			
				• Use of <i>Rhizobium</i> , PSB and VAM			
				1kgeach/ha			
				• Spray with pulse magic (UAS,			
				Raichur) 10g/l @ 5kg/ha			
				• Installation of pheromone traps @			
				8no. / ha(16 lures)			
				• Spray with profenophos @ 2ml/l-			
				ovicidal- 1 l/ha			
				• Spray with neem based insecticide			
				@3ml/l – 11 /ha			
				• Spray with indaxicarb @0.5ml/l -200			
				ml / ha			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
BRG-5 Seeds	3 kg	300-00	25	37,500-00	• Germination (%)	SMS (Plant Protection,
Rhizobium	0.4 kg	50-00			• Plant height (cm)	Agronomy,
PSB	0.4 kg	50-00			• No. of branches/plant	Agricultural Extension,
Pulse magic	2 kg	400-00			• No. of pods/plant	Soil Science) & SSH
Pheromone traps &	Trap 3 nos &	200-00			• Incidence of pod borer	
lures	lures 6 nos.				and wilt (%)	
Profenophos	0.41	250-00			• Yield (a/ba)	
Indaxicarb	0.081	250-00				
		1500-00		37,500-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
3	Pulses	Field Bean	<ul> <li>Low yield</li> </ul>	Integrated crop management in	Variety	HA-4	UAS, Bengaluru
		(Avare)	-	field bean (Avare)			
				• Use of HYV HA-4 @ 30 kg/ha			
				• Seed treatment with <i>Trichoderma</i>			
				@4g /kg of seed			
				• Seed treatment and soil application of			
				Rhizobium, PSB 2.0 kg each /ha			
				• Pulse Magic @ 5kg/ha (Flowering			
				and pod formation stage)			
				• Use of trap crop @ 5 kg/ha			
				• Use of pheromone traps @10 No./ha			
				• Spraying of quinolphos @ 1.25L			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be studied	Team members
	Demo	Demo		Demo (Rs.)		
HA-4	12 kg	2400-00	5	17,800-00	• No. of pods/plant	SMS (Agronomy,
Rhizobium, PSB,(0.8kg	1.6 kg	160-00			• Incidence pod borer (%)	Plant Protection, Soil
each)					• Test weight (g)	Science) & SSH
Trichoderma	0.8 kg	80-00			• Yield (g/ha)	
Pulse magic	2 kg	400-00				
Ha pheromone trap	4 No.	240-00				
Quinolphos	0.5 L	280-00				
		3560-00		17,800-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
4	Pulses	Black gram	Improper	Integrated crop management in	Variety	DBGV-2	UAS, Dharwad
	(NFSM)		Nutrient	blackgram			
			Management	• Use of DBGV-2 seeds: 25 kg/ha			
			• Single crop per	• Seed treatment with calcium chloride			
			year	@ 2%			
			Mono cropping	Application of biofertilizers			
			<ul> <li>Micronutrient</li> </ul>	• Spray with pulse Magic @ 5 kg/ha			
			deficiency	(10 g/liter)			
				• Spray with imidachloprid @ 0.3 ml/l			
				-200 ml / ha.			
				• Spray with hexaconazole @ 1 ml/l-			
				500 ml/ha			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Seeds DBGV-2	10 kg	2000-00	10	33,200-00	• Soil fertility status	SMS (Soil Science,
Calcium chloride 500 g	500 kg	100-00			before and after	Agronomy, Plant
Rhizobium, PSB &	_				• No. pods per plant	Protection)
VAM @ 3 kg	3 kg	240-00			• Test weight (g)	
Pulse magic 2 kg	2 kg	400-00			• Yield $(q/ha)$	
Imidachloprid	100 ml	160-00			11010 (4110)	
Hexaconazole	500 ml	420-00				
				33,200-00		

## 9.5 Commercial Crops:

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of	Source of
No.		enterprise	problem		Hybrid or	the Hybrid	Technology
					Variety	or Variety	
1	Commercial	Cotton	Improper	Integrated crop management in cotton	Hybrid	Bt	UAS
	Crops		nutrient	Recommended dose of fertilizers			Bengaluru
			management	Maintaining Proper spacing			
			• Square dropping	• Trap crop bhendi (25:1)			
			Incidence of	Yellow sticky trap			
			sucking pest	• Spraying of Fipronil 80WG @ 0.3g/l			
			Leaf reddening	against sucking pests			
			Improper	• Spraying of 1% MgSO <sub>4</sub> + 1% KNO <sub>3</sub> at			
			spacing	90 and 110 DAS			
				• Spraying of planofix (1 ml/4.5 l of			
				water) at flowering stage			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Yellow sticky trap	10 No.	365-00	20	45,300-00	• Square dropping (%)	SMS (Soil Science,
Fipronil 80WG	40 g	750-00			• Leaf reddening (%)	Agronomy, Plant
Magnesium sulphate	4 kg	400-00			• Cost of production	Protection)
KNO <sub>3</sub>	4 kg	600-00			• Yield (g/ha)	
Planofix	100 ml	150-00			(4,)	
		2265-00		45,300-00		

## 9.6 Horticultural Crops:

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
1	Horticulture	Mango	• Low	Integrated crop management in	Variety	Alphanso	IIHR, Bengaluru
			productivity of	mango			
			existing	• Foliar application of planofix @			
			orchards	0.25 ml/4 l			
				• RDF			
				Pruning of old branches			
				• Mango special @ 5 g/l			
				• Thiomethaxam @ 0.3 gm/l			
				• Application of COC to stem @ 3g/l			
				• Use of fruit fly traps			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Planofix	200 ml	120-00	10	20,000-00	• Soil testing before and	SMS (Horticulture,
Fruit fly trap	4 no.	400-00			after	Plant protection) &
Mango Special	8 kg	1480-00			• Percent dropping (%)	SSH
					• Percent fruit set (%)	
					• Yield (q/ha)	
		2000-00		20,000-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
2	Horticulture	China Aster	• Low	Demonstration of yield & income	Variety	Arka Kamini	IIHR, Bengaluru
			productivity of	potential of China Aster, Arka			
			existing	Kamini			
			Flower crops	• Integrated nutrient management			
				• IPM measures			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members
	Demo	Demo		Demo (Rs.)	studied	
Arka Kamini seeds	150 g	1000-00	07	7,490-00	• Yield (%)	SMS (Horticulture,
Trichoderma	5kg	70-00			• Length of flower (cm)	Soil Science) & SSH
					Flower diameter	
		1070-00		7490-00		

S.	Category	Crop/	Prioritized problem		Technology to be demonstrated	Specify	Name of	Source of
No.		enterprise				Hybrid or	the Hybrid	Technology
						Variety	or Variety	
3	Horticulture	Marigold	• Non use of Flowers as		Demonstration of yield & income	Variety	Arka Agni	IIHR,
			inter crop in early		potential of marigold, Arka Agni			Bangalore
			stage of crop growth		in young Arecanut gardens			
			in Arecanut	٠	Seedlings treatment with			
					trichoderma			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be studied	Team members
	Demo	Demo		Demo (Rs.)		
Arka Agni Seeds	1500 seedlings	3000-00	05	15,000-00	<ul><li>Number of flowers/plant</li><li>days to flowering</li><li>Yield of marigold</li></ul>	SMS (Horticulture, Soil Science) & SSH
		3000-00		15,000-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
4	Horticulture	Onion	• Low	Demonstration of yield &	Variety	Bhima Super	AICRP on onion
			productivity of	income potential of Onion,			and Garlic, RC,
			existing	Bhima Super			Babbur
			Varieties	Introduction of Bhima Super			
				variety			
				• Application of gypsum @ 2.5			
				q/ha			
				• Seed treatment with			
				Trichooderma			
				• Use of post emergent herbicides			
				• Foliar nutrition with water			
				soluble fertilizers			
				• Plant 2 rows of maize or outer			
				row of maize and inner row of			
				wheat surrounding onion crop			
				(250sq.m) at least 30 days prior to			
				transplanting to block adult			
				thrips			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be studied	Team members
	Demo	Demo		Demo (Rs.)		
Bhima Super seeds	4 kg	8000-00	04	32,000-00	• Yield (q/ha)	SMS (Horticulture,
					• Seed germination (%)	Soil Science) & SSH
					• Weight of bulb (g)	
					• Economics	
		8000-00		32,000-00		

#### 9.7 Livestock:

S.	Category	Crop/	Prioritized problem	Technology to be	Specify	Name of	Source of
No.		enterprise		demonstrated	Hybrid or	the Hybrid	Technology
					Variety	or Variety	
1	Livestock	Dairying	• Lower production,	Integrated Management of	Crossbred		KVAFSU (Bidar)
			• Repeat breeding &	dairy Animals for better	dairy animals		
			Infertility problems	performance (Feeding TMR)			
			• Low quality and	• Balanced nutrition,			
			unhygienic milk	deworming, use of saaf kit			
			production	to avoid mastitis.			
			Mastitis problems	• Fodder enrichment			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be studied	Team members
	Demo	Demo		Demo (Rs.)		
Dewormer	3g x 2	120-00	05	8,850-00	Milk yield	SMS (Animal
ASMM	1kg x 3	450-00			• Milk quality	Science,
VAM tonic	5 lt x 1	500-00			• Cost of milk production	Agricultural
Saaf kit	200 ml x1	100 -00			Mastitis Incidence	Extension) & SSH
Enzymex	1 kg	150-00			Reproductive parameters	
Brolaytone	500 ml	450-00			• Reproductive parameters	
		1770-00		8,850-00		

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
2	Livestock	Fodder	• Fodder scarcity	Establishment of fodder cafeteria	Hybrid/	DHN-6,	KVAFSU (B)
			especially		Variety	MP Charry,	
			leguminous			Lucerne,	
			fodder			Sesbenia,	
			• Low fodder			Chaya	
			yield and				
			palatability				
			problems				

Name of	Qty per	Cost per	No. of Demo	Total cost for	Parameters to be studied	Team members
critical input	Demo	Demo		the		
				Demo (Rs.)		
Napier root slips	2000 No.s	1000-00	05	8,000-00	• Fodder yield (t/ha)	SMS (Animal Science,
Multicut Jowar	3 kg	300-00			Economics	Agricultural
Lucerne	0.5 kg	250-00				Extension) & SSH
Sesbania/Chaya	100 g	50-00				
	-					
		1600-00		8,000-00		

S.	Category	Crop/	Prioritized problem	Technology to be	Specify	Name of the	Source of
No.		enterprise		demonstrated	Hybrid or	Hybrid or	Technology
					Variety	Variety	
3	Livestock	Sheep and	• Lower body weight	Balanced feeding and total	Bellary local		KVAFSU (Bidar)
		goats	gain and delayed	deworming in small ruminants	Х		
			puberty due to under	(Stall feeding method) for			
			nutrition and	better body weight gain and			
			parasitic infestation.	reproductive efficiency.			

Name of critical input	Qty per Demo	Cost per	No. of	Total cost for the	Parameters to be	Team members
		Demo	Demo	Demo (Rs.)	studied	
Dewormer	150 mg x 20 No.	100-00	10	13,500-00	• Body weight gain	SMS (Animal Science,
Liver tonic	1 lt x 3 No.	600-00			Maturity time	Agricultural Extension)
Special mineral mixture	5 kg x 1 No.	650-00			(Puberty) & other	& SSH
					reproductive	
					parameters	
		1350-00		13,500-00		

#### 9.8 Fisheries:

S.	Category	Crop/	Prioritized	Technology to be demonstrated	Specify	Name of the	Source of
No.		enterprise	problem		Hybrid or	Hybrid or	Technology
					Variety	Variety	
1	Fisheries	Fish	• Low yield	Integrated Management of Fish	Variety	Catla catla, Labeo	KVAFSU, Bidar
			-	culture in Big ponds		rohita,	
				<ul> <li>Pond preparation &amp; management</li> </ul>		Cyprinus carpio,	
				<ul> <li>Seed selection and stocking</li> </ul>		Pangassius sutchi,	
				<ul> <li>Feed and feeding management</li> </ul>		Hypophalmichthys	
				• Health and water quality monitoring		molitrix	
				• Harvesting			

Name of critical input	Qty per	Cost per	No. of Demo	Total cost for the	Parameters to be	Team members	
	Demo	Demo		Demo (Rs.)	studied		
Fish seeds	5000	5000-00	05 (each demo	27,500-00	• Average body weight	SSH, SMS (Animal	
Vitamin mineral	5 kg	500-00	= 1acre)		(g)	Science)	
mixture					• Yield (t/ha)		
		5500-00		27,500-00			

9.9 Others:

S.No	Thematic area	Crop / Enterprise	Major problem	Related field intervention (OFT/FLD)*	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
1	2	3	4	5	6	7	8	9
10.1	Crop Producti	on		1	1	1	1	1
	ICM	Foxtail millet	<ul><li>Low yield,</li><li>No seed treatment with Bio fertilizers</li></ul>	OFT	• Improved production technology for higher yield in Foxtail millet	01	25	SMS (Agronomy)
	ICM	Bengal gram	<ul> <li>Low yield,</li> <li>No seed treatment with Bio fertilizers</li> </ul>	OFT/FLD	• Importance of Seed treatment in Bengal gram to increase the	01	25	SMS (Agronomy) SMS (Plant
			• Pod borer and wilt incidence		<ul> <li>yield</li> <li>Pod borer management through pheromone traps</li> </ul>	01	25	protection)
	ICM	Finger millet	<ul> <li>Low yield,</li> <li>No seed treatment with Bio fertilizers</li> </ul>	FLD	• Seed treatment with bio fertilizers to improve the production	01	25	SMS (Agronomy)
					• Importance of foliar nutrition in increasing the yield under moisture stress	01	25	
	ICM	Groundnut	<ul> <li>Low yield</li> <li>Non availability of quality seed for sowing</li> <li>No seed treatment</li> <li>Root rot, tikka leaf disease</li> <li>Poor fodder quality</li> </ul>	FLD	• Improved production technology in groundnut to increase the productivity	01	30	SMS (Agronomy)

#### 10 Training for Farmers/ Farm Women during 2016-17

1	2	3	4	5	6	7	8	9
	ICM	Bengal Gram	<ul> <li>Low yield</li> <li>No seed treatment with Bio fertilizers</li> <li>Non-availability of HY varieties.</li> <li>Improper nutrient management</li> <li>Pod borer &amp; Wilt</li> </ul>	FLD/OFT	<ul> <li>Importance of Seed treatment in Bengal gram to improve the yield</li> <li>Monitoring of pod borer through pheromone traps</li> </ul>	01	25	SMS (Agronomy) SMS (Plant protection)
	ICM	Field bean	<ul> <li>Low yield</li> <li>No seed treatment with Bio fertilizers</li> <li>Non-availability of HY varieties.</li> <li>Improper nutrient management</li> <li>Pod borer</li> </ul>	FLD	<ul> <li>Improved production technology in HYV in field bean</li> <li>Importance of Micro nutrient (pulse magic) spraying at peak flowering</li> </ul>	01	25	SMS (Agronomy) SMS (Plant protection)
10.2	Horticulture Pr	roduction						
	Plantation Crops Production and Management Technology	Arecanut	<ul> <li>Non use of interspace in younger periods</li> <li>Low income in existing intercrops</li> </ul>	FLD	Remunerative intercrops in the young Arecanut Gardens	01	30	SMS (Horticulture , Plant Protection and Soil Science)
		Coconut	<ul> <li>Non use of interspace in younger periods</li> <li>Low income in existing intercrops</li> </ul>	FLD	Remunerative intercrops in the young Coconut Gardens	01	30	SMS (Horticulture, Plant Protection and Soil Science)
	<b>Fruit Crops</b> Cultivation of fruit	Banana	<ul> <li>Micronutrient deficiency</li> <li>Low bunch weight</li> <li>Low productivity per unit area</li> </ul>		• ICM in Banana	01	30	SMS (Horticulture, Plant Protection and Soil Science)

1	2	3	4	5	6	7	8	9
	Vegetable Crops Off season vegetables	Onion	<ul> <li>Low productivity of existing varieties</li> <li>Incidence of purple blotch and thrips</li> </ul>	FLD	• ICM in Onion	01	30	SMS (Horticulture , Plant Protection and Soil Science)
	Ornamental Plants Nursery Management	Flower crops	<ul> <li>Use of local varieties</li> <li>Lack of quality seeds / planting materials.</li> </ul>		Nursery techniques in Horticulture crops	01	30	SMS (Horticulture and Soil Science)
10.3	Livestock Prod	luction						
	Livestock Production	Dairying	<ul> <li>Lower production</li> <li>Repeat breeding &amp; Infertility problems, Low quality and unhygienic milk production, Mastitis problems</li> </ul>	FLD and OFT	<ul> <li>Balanced nutrition in dairy cattle</li> <li>Clean and quality milk production</li> </ul>	01	25 25	SMS (Animal Science)
10.4	Home Science		1			I		
10.5	Plant Protectio	n						
	IPDM	Paddy	<ul> <li>Stem borer, BPH, Blast and Sheath blight problem</li> <li>No seed treatment with biofertilizers</li> </ul>	FLD	• Seed treatment with carbendizim and seedling treatment with biofertilizers	01	20	SMS (Plant Protection Agronomy, and Soil Science)
	IPDM	Maize	• Stem borer and turcicum leaf blight	FLD	• Seed treatment with chlorpyrphos and biofertilizers	01	20	SMS (Plant Protection Agronomy, and Extension)

1	2	3	4	5	6	7	8	9
	IPDM	Redgram	• Pod borer and wilt	FLD	• ICM in redgram	01	25	SMS (Plant
								Protection
								Agronomy,
								and
								Extension
	IPDM	Sunflower	• No spray with	FLD	• ICM in sunflower	01	20	SMS (Plant
			boron					Protection
			• Incidence of bud					Agronomy,
			necrosis and head					and
			borer					Extension
	IPM	Banana	<ul> <li>Banana skipper</li> </ul>	OFT	• Identification of	01	15	SMS (Plant
					skipper symptoms in			Protection
					banana plant			and
10.6	Dec la d'an el l							Horticulture)
10.0	Production of I	nputs at Site						
10.7	Son nearth and	Cotton	• Immenon an autriant	ELD	• INIM in action	01	25	SMS (Soil
	11 11 11	Cotton	Improper numeric     management	ILD		01	23	Sivis (Soli Science)
	INM	Sorghum	Improper nutrient	FLD	• INM in Sorghum	01	25	SMS (Soil
		8	management.			-	_	Science)
			Moisture stress					,
	INM	Paddy	• Low soil fertility	Others	• Soil fertility	01	25	SMS (Soil
					management paddy			Science)
					soils			
	INM	Black gram	Improper nutrient	FLD	• INM in black gram	01	25	SMS (Soil
			management					Science)
10.8	PHT and value	addition						
10.9	Capacity Build	ing Group Dyna	mics					
10.10	Farm Mechani	zation						
10.11	Fisheries Produ	uction Technolog	gies					
	Aquaculture	Fish	• Low yield	FLD	• Inland aquaculture for	01	20	SSH
10.15					prosperity			
10.12	Mushroom pro	duction						
10.13	Agro Iorestry							
10.14	Dee Keeping							
10.15	Sericulture							

#### 11. Training for Rural Youth during 2016-17

S.No	Thematic area	Crop /	Major problem	Related field	Training Course Title**	No. of	Expected	Names of the
		Enterprise		intervention		Courses	No. of	team
				(OFT/FLD)*			participant	members
1	2	2	4	=		7	S 8	Involved
	<u> </u>	3	4	5	6	/	ð	9
11.1	Enrichment of	II Finger millet	• Door quality of	FLD	• Enrichment of fodder	01	20	SMS
	fodder	Tinger millet	• Pool quality of foddor	TLD	• Elificitient of fodder	01	20	(A gronomy
	Iouuci		No anrichment		increase the palatability			and Animal
			• No enficilment		and milk vield			Science)
			summer		and mink yield			Selence).
	Seed	Foxtail Millet	Non	OFT	Seed production	01	25	SMS
	production		availability of		techniques in minor			(Agronomy)
			quality HYV		millets			
			seeds					
11.2	Horticulture Pro	oduction		1		•		1
	Post harvest	Coconut	Non availability	FLD	• Empowerment of Rural	02	50	SMS
	Technology		of labours for		Youth in Coconut palm			(Horticulture, Plant Protection
			harvesting of		climbing			and Soil
			nuts					Science)
	Nursery	Vegetable	Lack of		Nursery techniques in	01	20	SMS
	management of	crops	availability of		vegetable crops			(Horticulture,
	Horticulture		good quality					Plant
	crops		seedlings					Protection and
								Soil Science)
	Integrated crop	Flower crops	• Lower	FLD	Protected cultivation	01	20	SMS
	production		productivity in					(Horticulture,
			open					Plant
			cultivation					Protection and
1								Soil Science)

1	2	3	4	5	6	7	8	9
11.3	Livestock Produ	iction						
	Nutrition management	Dairying	<ul> <li>Lower production,</li> <li>Repeat breeding &amp; Infertility problems, Low quality and unhygienic milk production, Mastitis problems</li> </ul>	FLD and OFT	• Scientific management of dairy animals for better performance	01	25	SMS (Animal Science)
			<ul> <li>Lower body weight gain &amp; reproductive problems in small ruminants</li> </ul>		• Advantages of stall feeding methods in sheep rearing.	01	25	
11.4	Home Science							
11.5	Plant Protection	<u>.</u>		•				-
	IPDM	Paddy	• Incidence of blast, sheath blight and stem borer	FLD	• Identification of symptoms of blast, sheath blight and stem borer in field	01	20	SMS (Plant Protection Agronomy, and Soil Science)
11.6	Production of In	puts at Site						
11.7	Soil Health and	Fertility						
	IFS	Integrated farming system	No use of organic manure		• Integrated farming system for sustainable agriculture	01	25	SMS (Soil Science, Agronomy)
11.8	PHT and value ad	ldition						
11.9	Capacity Building	g Group Dynamics	S					
11.10	Farm Mechanizat	tion						
11.11	Fisheries Product	ion Technologies						
11.12	Mushroom production							
11.15	Ree Keening							
11.15	Sericulture							
11.15	Scriculture							

#### 12 Training for Extension Personnel during 2016-17

S.No.	Thematic area	Training Course Title**	No. of Courses	Expected No. of	Names of the team
12.1	Cron Production		Courses	participants	members myoryed
12.1	ICM	Production technology in Bt Cotton to increase the yield	01	25 (AO's AAO)	SMS (Agronomy)
	ICM	• Soil and water conservation technique in dry land farming in Harapanahalli taluk	01	30 Field staff of Department of Agriculture	SMS (Agronomy)
12.2	Home Science			·	
12.3	Capacity Building and Group	p Dynamics			
12.4	Horticulture				
	Integrated Crop management	• Importance of FPO's and their operation	01	30	SMS (Horticulture and Soil Science)
12.5	Livestock Production & Man	agement			
	IDM	Prevention and control of contagious and infectious diseases in Livestock	01	25-30	SMS (Animal Science & Agricultural Extension
	Nutrition management	• Silage and Hay making methods and It's advantages	01	25-30	SMS (Animal Science & Agricultural Extension
12.6	Plant Protection		•	•	
	IPDM	• IPDM in Pulses	01	25	SMS(PantProtectionandAgriculturalExtension).
12.7	Farm Mechanization				
	ICM	• Mechanization in paddy production system to increase the productivity	01	25 AO and AAO	SMS (Agronomy)
12.8	PHT and value addition				
12.9	Production of Inputs at Site				
12.10	Sericulture				
12.11	Fisheries				

#### 13 Vocational trainings during 2016-17

Sl. No.	Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participants	Sponsoring agency	Names of the team members involved
13.1	<b>Crop Production</b>						
	Composting and	• Different methods of	01 (7 days)	SHGs	20		SMS (Agronomy and
	Vermicomposting	production of compost from agriculture waste					Soil Science)
13.2	Home Science	· · · · · · · · · · · · · · · · · · ·					
13.3	Capacity Building and G	roup Dynamics					
13.4	Horticulture						
	Protected cultivation	• Protected cultivation in flowers	01 (7 days)	FPO members	20	NHM	SMS (Horticulture, Plant Protection, Soil Science) & SSH
13.5	Livestock Production &	Management					
	Nutrition management	• Integrated dairy farming for sustainable income.	02 (7 days)	SHGs and DDFA members	60	ASCI, New Dehli	SMS( Animal Science, Agricultural Extension)
		• Natural poultry Farming and It's importance	01 (7 days)	FPOs	25-30		SMS( Animal Science, Agricultural Extension)
13.6	Plant Protection						
13.7	Farm Mechanization						
13.8	PHT and value addition						
13.9	Production of Inputs at S	Site					
13.10	Sericulture						
13.11	Fisheries						

#### 14. Sponsored trainings during 2016-17

Sl. No.	Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration	Type of Participants (SHGs, NYKs, School students, Women Vouth	Expected number of participants	Sponsoring agency	Names of the team members involved
			(days)	etc.)			
14.1	<b>Crop Production</b>						
	ICM (Maize and paddy)	• Integrated crop management in maize and paddy(Seed treatment with bio fertilizers)	01 (02)	SHG farmers	30	Dhanuka Pesticides ltd.	SMS (Agronomy)
14.2	Home Science						
14.3	Capacity Building and G	roup Dynamics					
14.4	Horticulture				1	1	1
	Increasing production and productivity of crops	• Recent trends in production technology of plantation crops	02 (03)	Youths	100	National Horticulture Mission	SMS (Horticulture & Soil Science)
	Methods of protected cultivation	Protected cultivation	01 (02)	FIG's	50	KWDP-II Sujala-III Dept. of Horticulture	SMS (Horticulture & Plant Protection)
14.5	Livestock Production & I	Management					
	Dairying	• Integrated dairy farming and vermiculture/ vermicompost production for livelihood security.	02 (06)	SHGs and selected rural youths.	50-60	Zilla Panchayath, Davanagere and NGOs	SMS (Animal Science & Agricultural Extension)
14.6	Plant Protection	1	1		1	1	
	IPDM	• IPDM in paddy	01 (01)	Field level workers	25	Adan India Ltd.	SMS (Plant Protection and Extension)
14.7	Farm Mechanization						
14.8	PHT and value addition						
14.9	Production of Inputs at Site						
14.10	Sericulture						
14.11	Fisheries						

Sl. No.	Title	Scientist	Duration	No. of participants
1.	Scientific fish culture for pleasure and treasure	Dr Devaraja T. N., SS&H	3 days	20
2.	Power of pulses in rural economy- embark on the opportunity	Mr Mallikarjuna B.O., SMS (Agronomy)	3 days	15
3.	Nutritional garden	Mr. Basavanagowda M.G., SMS (Horticulture)	3 days	50
4.	Profitable dairying for rural youth	Dr Jayadevappa G.K., SMS (Animal Science)	4 days	20
5.	Restoring soil health now for better wealth in future	Mr Sannagoudar H.M., SMS (Soil Science)	3 days	20
6.	Safe use of pesticides and safety precaution measures during spraying	Mr Prasannakumar N., SMS (Plant Protection)	3 days	20
7.	Marketing strategies for Self Help Groups	Mr Raghuraja J., SMS (Agricultural Extension)	3 days	20

#### \*\*\*\*\*\*\*\*\*\*\*\* PAID TRAININGS \*\*\*\*\*\*\*\*\*\*\*

#### 15. Extension programmes during 2016-17

Sl. No.	Extension Programme/ Activity*	Programme/ Activity* No. of programmes or activities		Names of the team members involved
15.1	Advisory Services	1500	1800	
15.2	Diagnostic Visits	10		
15.3	Field Day	24	1400	
15.4	Group Discussions	5	300	
15.5	Kisan Gosthi	1	150	
15.6	Film Show	20	850	
15.7	Self -Help Groups	5	250	
15.8	Kisan Mela	2		
15.9	Exhibition	3		
15.10	Scientists' Visit to Farmers Field	110		
15.11	Plant/Soil Health/Animal Health Camps	1	150 Samples + 200	
			animals	
15.12	Farm Science Club	1	25	
15.13	Ex-Trainees Sammelan	1	100	
15.14	Farmers' Seminar/Workshop	8	600	All SMS' &
15.15	Method Demonstrations	15	200	SSH
15.16	Celebration of Important Days	3	110	
15.17	Special Day Celebration	4	250	
15.18	Exposure Visits	3	100	
15.19	Technology Week,	1	1000	
15.20	Farmers Field School (FFS)	2	50	
15.21	Farm Innovators Meet	1	100	
15.22	Awareness Programs	2	200	
	Others, pl. specify			
	1 Kisan Mobil Advisory Services	50	3000	
	2 Radio talk	05		
	3 TV talk	09		
	4 Popular articles	10		
	5 News paper coverage	50		
	6 Plant Health Clinic services	300	300 samples	

#### 16. Activities proposed as Knowledge and Resource Centre during 2016-17

#### 16.1 Technological knowledge

Sl. No.	Category	Details of technologies	Area (ha)/	Names of the team members
			Number	involved
1	2	3	4	5
16.1.1	Technology Park/ Crop cafeteria			
	Vegetable Crop cafeteria	Crop cafeteria of varieties developed	0.2 ha	SMS (Horticulture) & SSH
		by IIHR Bengaluru for Davangere		
		district		Names of the team members involved         5         SMS (Horticulture) & SSH         SMS (Horticulture) & SSH         SMS (Horticulture) & SSH         SMS (Agronomy)         SMS (Plant protection)         SMS (Animal Science)         S         S         SMS (Soil Science) & Programme Assistant (Lab Technician)         SMS (Plant protection)
	Fruit orchard	Drumstick Block (KDM-1) +	0.2 ha	SMS (Horticulture) & SSH
		Coconut germ plasm		
		Mixed fruit orchard	0.4 ha	SMS (Horticulture) & SSH
16.1.2	Demonstration Units			
	INSIMP	Millets processing and Powdering	1 unit	SMS (Agronomy)
	Trichoderma	Trichoderma production unit	1 unit	SMS (Plant protection)
	Dairy demonstration unit	<ol> <li>Crossbred Cow Dairy unit</li> <li>Milking Machine (single bucket)</li> <li>Fodder cutting Machine(5 HP)</li> <li>Rubber mats for cattle shed</li> <li>Azolla production unit</li> <li>Vermiculture &amp; Vermicompost units</li> <li>Biogas production unit</li> <li>Gober gas production unit</li> <li>Verietal fodder plots</li> <li>Hydroponic fodder production</li> </ol>	5-Cow unit 01 01 4 ft x 6 ft-10 Nos 4 ft x8 ft x1 ft-5 Nos 20 ft x4 ft x2.5 ft- 10 No.s 01 01 1 acre 2 ft x1.5 ft x 0.25 ft-8 trays	SMS (Animal Science)
	Fisheries	<ol> <li>Ornamental fish unit</li> <li>Farm ponds</li> <li>Fish seed hatchery</li> </ol>	1 unit 5 unit 1 unit	
16.1.3	Lab Analytical services			
	Soil & Water testing Lab	Soil and water analysis	3 students project	SMS (Soil Science) & Programme Assistant (Lab Technician)
	PHC Lao	Plant Analysis	1 unit	SIVIS (Plant protection)

1	2	3	4	5
16.1.4	Technology Week	Frontline Demonstration and on farm	1 (5 days)	All team members
		trials, demonstration units in the KVK		
		instructional farm will be exhibited.		
		An agricultural exhibition will be		
		organized in collaboration with		
		Development Department, Agri input		
		agencies, Krishika Samaj, NGO's.		
		Seminars and Ghosties will be		
		organized on the occasion. High		
		school students will be mobilized to		
		participate in the programme		

#### **16.2 Technological Products**

Sl.No.		Name of the	Name of the product	Quantity (q)/		
	Catagomy	Production		Number planned to	Names of the team	
	Category	Partner		be produced during	members involved	
		Agency, if any		2016-17		
16.2.1	Seeds	UHS, Bagalkot	Drumstick seeds	100 kg	SMS (Horticulture)	
16.2.2	Planting materials		Mango seedlings (Alphanso)	5000 Numbers	SMS (Horticulture)	
			Arecanut seedlings (Channagiri Local)	5000 Numbers	SMS (Horticulture)	
			Drumstick seedlings(KDM-1)	10000 Numbers	SMS (Horticulture)	
			Fodder root slips	10000 thousand No.s	SMS (Animal Science)	
			Azolla culture	250-300 kg		
16.2.3	Bio-products		Trichoderma	5.0 q	SMS (Plant Protection)	
			Banana Special	15 q	SMS (Horticulture)	
			Vermicompost	15-20 tonnes	SMS (Animal Science)	
			Earthworms	30-40 kgs	SMS (Animal Science)	
			Biogas production	10 cu ft gas/day	SMS (Animal Science)	
16.2.4	Livestock strains		Good pedigree calves	2-3 Nos	SMS (Animal Science)	
16.2.5	Fish fingerlings	Department of	Fish fingerlings	5000 No.s	Senior Scientist-Cum-	
		Fisheries,			Head	
		Davanagere				

#### 16.3 Technological Information

Sl.No.	Category	Technological capsules / Number	Names of the team members involved
16.3.1	Technology backstopping to line departments		
	Agriculture	02	SMS (Agronomy)
	Horticulture		
	Plant Protection	04	SMS (Plant Protection)
	Animal Husbandry	01	SMS (Animal Science & Agricultural
			Extension)
	Fisheries		
	Agricultural Engineering		
	Sericulture		
	Others, pl. specify		
16.3.2	Literature/publication		
		03	SMS (Agronomy)
	Leaf lets	02	SMS (Horticulture)
		01	SMS (Plant Protection)
		01	SMS (Plant Protection)
	Folder	02	SMS (Animal Science & Agricultural
		02	Extension)
		02	SMS (Horticulture)
	Book	01	SMS (Agricultural Extension)
16.3.3	Electronic Media		
		01	SMS (Agronomy)
	Television	05	SMS (Plant Protection)
		01	SMS (Animal Science)
		02	SMS (Horticulture)
		02	SMS (Plant Protection)
	Radio	01	SMS (Animal Science)
		02	SMS (Horticulture)
16.3.4	Kisan Mobile Advisory Services	50	All team members
16.3.5	Information on centre/state sector schemes and	Book on 'Service providers of the district	SMS (Agricultural Extension)
	service providers in the district.	and centre/state sector schemes' will be	
		revised	

#### 17. Additional Activities Planned during 2016-17

Sl. No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
17.1	NICRA	Crop technology demonstration			SSH as PI, SMS (Agronomy & Animal Science as Nodal Officers & other SMSs are members
17.2	INSIMP	Millet processing and powdering	Grading and cleaning Powdering		SMS (Agronomy)
17.3	KSTA, Bengaluru	State Seminar	One state level seminar on Pulses for nutritional security	1 Lakh	SMS (Agronomy) & Senior Scientist and Head
17.4	Plant Health Clinic	Plant diagnosis	Diagnosis of affected plant samples (300 No.s)	-	SMS (Plant Protection)
17.5	Comprehensive Horticulture Development Scheme (CHD), Depat. Of Horticulture, Govt. of Karnataka	Training	2 Trainings for the 100 Banana farmers on value addition	50,000/-	SMS (Horticulutre)
17.6	Davanagere Dairy Farmers Association(R), Davanagere	Artificial Insemination service	Providing AI service with good quality semen of different breeds at farmers doorstep (150-200 per month)	1.0 lakh	SMS (Animal Science) & DDFA members
17.7		<ul> <li>Impact of FLD on velvet beans as a intercrop in Arecanut.</li> <li>Impact of terrace garden trainings.</li> <li>Production and Marketing problems of Banana growers in Davangere district.</li> <li>Study on communication skills of personnel from dept. of Agriculture and Horticulture.</li> <li>To prepare Compendium of OFTs and FLDs carried out by KVK (2005 to 2015).</li> <li>To popularize development department schemes in KVK extension activities.</li> </ul>	Impact studies of KVK activities and other activities of SAC recommendations		SMS (Agricultural Extension)

#### 18. **Revolving Fund**

#### **18.1** Financial status

Opening balance as on 01.04.2015 (Rs.in Lakh)	Expenditure incurred during 2015-16 (Rs.in Lakh)	Receipts during 2015-16 (Rs.in Lakh)	Closing balance as on 31.01.2016 (Rs.in Lakh)	Expected closing balance by 31.03.2016 (Including value of material in stock/ likely to be produced) (Rs. in Lakh)
1.974	31.945	31.712	1.741	4.00

#### 18.2 Plan of activities under Revolving Fund

S. No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
18.2.1	INSIMP (Millet processing Cleaning and powdering)		10,000-00	SMS (Agronomy)
18.2.2	Bioagent production ( <i>Trichoderma</i> , <i>PSB</i> and <i>Azospirillum</i> )	800 kg	50,000-00	SMS (Plant Protection)
18.2.3	Horticulture nursery	13000 Seedlings	2.0 Lakhs	SMS (Horticulture)
18.2.4	Banana Special	2000 kg	1.50 Lakhs	SMS (Horticulture) & Programme Assistant (Lab Technician)
18.2.5	Crossbred cow dairy unit	700-750 lts	2,50,000-00	SMS (Animal Science)
18.2.6	Vermicompost	15 tonnes	1,00,000-00	SMS (Animal Science)
18.2.7	Earthworms production	25-30 kgs	7,500-00	SMS (Animal Science)
18.2.8	Azolla production	250 kgs	5,000-00	SMS (Animal Science)
18.2.9	Ornamental fish production	5000 No.	10,000-00	SSH
18.2.10	Sunhemp seed production	3 q	15,000-00	Farm Manager, SMS (Soil Science)
18.2.11	Velvet bean seed production	3 q	30,000-00	Farm Manager, SMS (Soil Science)
18.2.12	Dhaiancha seed production	3 q	15,000-00	Farm Manager, SMS (Soil Science)
18.2.13	Finger millet seed production	4 q	12,000-00	Farm Manager, SMS (Soil Science)
18.2.14	Fodder production	40 t	To use for dairy animals	Farm Manager, SMS (Soil Science, Animal Science)
18.2.15	Arecanut seedlings	10000	25,000-00	Farm Manager, SMS (Soil Science, Horticulture)
18.2.16	Coconut seedlings	1500	40,000-00	Farm Manager, SMS (Soil Science, Horticulture)
18.2.17	Mango		1,25,000-00	Farm Manager, SMS (Soil Science, Horticulture)
18.2.18	Arecanut		1,50,000-00	Farm Manager, SMS (Soil Science, Horticulture)
18.2.19	Sapota		15,000-00	Farm Manager, SMS (Soil Science, Horticulture)

Sl. No.	Туре	No. of samples to be analyzed	Names of the team members involved
19.1	Soil	1000	SMS (Soil Science & Programme Assistant (Lab Technician)
19.2	Water	700	
19.3	Plant		
19.4	Others		

#### 19. Activities of soil, water and plant testing laboratory during 2016-17

#### 20. E-linkage during 2016-17

S. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
20.1	Title of the technology module to be prepared	ICM in Redgram	
20.2	Creation and maintenance of relevant database system for KVK	October - 2016	Gaps will be completed
20.3	Any other (Please specify)		Data base on soil, water test, Radio talk, TV talk, Farmers Advisory Service and Guest lecture, training, FLD, OFT are completed and same will be maintained

#### 21. Activities planned under Rainwater Harvesting Scheme - Nil

#### 22. Innovator Farmer's Meet

Sl.No.	Particulars	Details
22.1	Are you planning for conducing Farm Innovators meet in your	Yes
	district?	
22.2	If Yes likely month of the meet	January, 2017
22.3	Brief action plan in this regard	Integrated Farming System practicing farmers in the district will be
		invited to KVK to address the gathering of interested farmers. This
		interactive meet will be the platform to share their unique profitable
		farming and non- farm experiences for the benefit of all.

#### 23. Farmers Field School (FFS) planned

S. No	Thematic	Title of the FFS	Critical Inputs	Quantity/	Budget	Names of the
	area			Number	proposed in	team members
					Rs.	involved
23.1	ICM	Integrated Crop	• Use of HYV JG-11	25 kg	1620-00	SMS (Agronomy,
		Management in Bengal	• Seed treatment with <i>Trichoderma</i> @	0.8 kg	80-00	Extension, Soil
		gram	4gm/kg of seed			Science, Plant
			• Seed treatment Rhizobium, PSB @	2.0 kg	200-00	Protection)
			1kg each			
			Pulse Magic @ 2kg/acre(Peak	2.0 kg	400-00	
			flowering and pod formation)			
			• Use of pheromone traps @ 4/acre	4 No.	250-00	
			• Spraying with Profenophos @ 2ml/L	1.0 L	550-00	
			of water			
			A. Critical Inputs		3,100-00	
			B. Meals and Refreshment during		5,000-00	
			the classes			
			C. FFS training kit		10,000-00	
			D. Field Day		5,500-00	
			E. Preparation of Folder		6,000-00	
				TOTAL	29,600-00	
23.2	Livestock	Scientific Management of	Milk Replacer	100 kg	2,000-00	SMS (Animal
	Production	Crossbred calves	Calf Starter		2,000-00	Science,
	and		Vitamins & minerals tonic		1,500-00	Agricultural
	Management		Deworming and Vaccination		500-00	Extension) & SSH
			Meals and refreshment		5,000-00	
			FFS kit		5,000-00	
			Exposure visit		5,000-00	
				Total	21,000-00	

#### 24. Budget - Details of budget utilization (2015-16) up to 31 January 2016 (Rs.)

SI.	Particulars	Sanctioned	Released	Expenditure
24.1	Recurring Contingencies			
24.1.1	Pay & Allowances	1,03,99,000	78,30,412	77,69,547
24.1.2	Traveling allowances	80,000	60,240	78,860
24.1.3	Contingencies	1 1		
24.1.4.1	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance	80,000	60,240	79,339
B	POL, repair of vehicles, tractor and equipments	1,00,000	75,300	94,073
C	Meals/refreshment for trainees	50,000	37,650	10,730
D	Training material	25,000	18,825	21,687
E	Frontline demonstration except oilseeds and pulses	3,09,000	2,32,677	1,61,693
F	On farm testing	30,000	22,590	22,222
G	NFSM-Cluster Front Line Demonstrations	75,000	75,000	57,951
Η	Maintenance of buildings			
Ī	Extension Activities	50,000	37,650	40,490
$\overline{J}$	Library	5,000	3,765	860
24.1	Total Recurring	1,12,03,000	84,54,349	83,37,452
24.2	Non-Recurring Contingencies			
24.2.1	Works			
24.2.2	Equipments including SWTL & Furniture			
24.2.3	Vehicle (Four wheeler/Two wheeler, please specify)			
24.2.4	Library			
24.2	Total Non Recurring	0	0	0
24.3	REVOLVING FUND	1		
24.4	GRAND TOTAL (A+B+C)	1,12,03,000	84,54,349	83,37,452

#### 25. Details of Budget Estimate (2016-17) based on proposed action plan

Sl. No.	Particulars	BE 2016-17 proposed (Rs.)
25.1	Recurring Contingencies	
25.1.1	Pay & Allowances	1,11,71,000-00
25.1.2	Traveling allowances	2,00,000-00
25.1.3	Contingencies	
Α	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	3,00,000-00
В	POL, repair of vehicles, tractor and equipments	3,00,000-00
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	75,000-00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	50,000-00
Ε	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2,18,800-00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	48,181-00
G	FLD under NFSM	2,09,025-00
Н	Training of extension functionaries	25,000-00
Ι	Maintenance of buildings	5,00,000-00
J	Establishment of Soil, Plant & Water Testing Laboratory	
Κ	Library	10,000-00
L	FFS	50,600-00
25.1	TOTAL Recurring Contingencies	1,31,57,606-00
25.2	Non-Recurring Contingencies	
25.2.1	Works	3,93,80,000-00
25.2.2	Equipments including SWTL & Furniture	64,30,000-00
25.2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify) [Rs.13 Lakhs for Jeep and Rs.2.10 Lakhs for Two Wheelers]	15,10,000-00
25.2.4	Library (Purchase of assets like books & journals)	1,00,000-00
25.2	TOTAL Non-Recurring Contingencies	4,74,20,000-00
25.3	REVOLVING FUND	
25.4	GRAND TOTAL	6,05,77,606-00-00

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## **Summary of Action Plan 2016-17 Details**

#### (A) On Farm Testing (OFT)

Sl.	Crop	Title	No. of Farmers/	Sanctioned
No.			trials	Amount (Rs.)
1	Foxtail millet	Assessment of foxtail millet varieties for higher yield under rainfed	03	2,880-00
2	Bengalgram	Assessment of Bengalgram varieties for wilt and drought tolerance	03	14,355-00
3	Banana	Assessment of different molecules for Banana Skipper management	03	3,000-00
4	Coconut	Flowers as Intercrop in Coconut Garden for additional income.	02	15,996-00
5	Onion	Role of sulphur in improving the productivity of onion	05	3,750-00
6	Dairying	Assessment of benefits of feeding urea treated paddy straw along with grain mixture on the performance of dairy animals.	05	8,200-00
		Total	21	48181-00

#### (B) Frontline Demonstration (FLD)

Sl.	Crop	Title	No. of Farmers/	Sanctioned
No.			Demo	Amount (Rs.)
1	Paddy	Integrated crop management in paddy with an emphasis on IPDM practices.	10	8,500-00
2	Maize	Integrated crop management in maize with an emphasis on IPDM practices.	15	16,500-00
3	Finger millet	Demonstration of HYV finger millet for delayed sowing (ML-365)	25	17,500-00
4	Sorghum	Integrated crop management in sorghum (SPV-2217)	10	15,100-00
5	Cotton	Integrated crop management in cotton	20	42,800-00
6	Mango	Integrated crop management in mango	06	10,600-00
7	China Aster	Demonstration of yield & income potential of China Aster, Arka Kamini	05	5,000-00
8	Marigold	Demonstration of yield & income potential of marigold, Arka Agni in young Arecanut gardens	04	12,000-00
9	Onion	Demonstration of yield & income potential of Onion, Bhima Super	05	40,000-00
10	Dairying	Integrated Management of dairy Animals for better performance (Feeding TMR)	05	8,850-00

11	Fodder	Establishment of fodder cafeteria	05	8,000-00
12	Sheep and goats	Balanced feeding and total deworming in small ruminants (Stall feeding method) for better body weight gain and reproductive efficiency.	05	6,450-00
13	Fish	Integrated Management of Fish culture in Big ponds	05	27,500-00
		Total	120	2,18,800-00

#### (C) NFSM (Technology Demonstrations)

Sl.	Crop	Title	No. of Farmers/	Sanctioned
No.			Demo	Amount (Rs.)
1	Groundnut	Integrated crop management in groundnut, GPBD-4	05	21,500-00
2	Sunflower	Integrated crop management in sunflower (KBSH-53) with emphases on IPDM	15	9,600-00
		practices.		
3	Bengalgram	Integrated crop management in bengalgram, JAKI-9218	25	71,625-00
4	Redgram	Integrated crop management in redgram, BRG-5	25	37,500-00
5	Field Bean	Integrated crop management in field bean, HA-4	10	35,600-00
6	Black gram	Integrated crop management in blackgram, DBGV-2	10	33,200-00
		Total	90	2,09,025-00

#### **D)** Farmers Field School (FFS)

Sl. No.	Thematic Areca	Title	Sanctioned Amount (Rs.)
1	Bengalgram	Integrated Crop Management in Bengalgram	29,600-00
2 Livestock Production and Management		Scientific Management of Crossbred calves	21,000-00
		Total	50,600-00

#### Abstract

Sl. No.	Particulars	No. of Trials/Demo.	Amount (Rs.)
А	OFTs	21	48,181-00
В	FLDs	120	2,18,800-00
С	NFSM (Technology Demonstrations)	90	2,09,025-00
D	FFS		51,600-00
	Grand Total	231	5,27,606-00

#### Trainings

Category	No. of programmes	No. of participants
Farmers/Farmwomen	25	625
Rural youths	10	230
Extension functionaries	07	185
Sponsored trainings	15	480
Paid trainings	07	165
TOTAL	64	1685