

## ICAR-Indian Institute of Horticultural Research Hessaraghatta Lake Post, Bengaluru



# ACTION PLAN REPORT

For the year: 2017-18

Venue: University of Horticultural Sciences, Bagalkot

Date : 2<sup>nd</sup> - 4<sup>th</sup> March 2017

## ICAR-Krishi Vigyan Kendra Hirehalli, Tumakuru-572 168

#### **ACTION PLAN OF KVKs IN ZONE VIII FOR 2017-18**

## 1. General information about the Krishi Vigyan Kendra

1.1	Name & address of KVK with Phone, Fax & e-mail	:	KRISHI VIGYAN KENDRA,					
			HIREHALLI,TUMAKURU-572168					
			Phone:0816-2243175 Fax: 0816-2243177					
			Email: iihrkvk@gmail.com					
1.2	Name & address of host organization	:	INDIAN INSTITUTE OF HORTICULTURAL RESEARCH					
			Hessaraghatta Lake Post, Bengaluru-560089					
			Phone:080- 28466420 Fax:080-28466291					
			Email: director@iihr.res.in,diriihr@icar.org.in, iihrdirector@gmail.com					
1.3	Year of sanction	:	24 <sup>th</sup> March, 2009					
1.4	Website address of KVK & date of last update		www.iihrkvk.org : 15.2.2017					

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

				If Permanent, I indicate	Please		If Temporary, pl. indicate the
Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Current Pay Band	Current Grade Pay	Date of joining	consolidated amount paid (Rs./month)
2.1	Sr. Scientist & Head	Dr. N. Logan&han	Agril. Extension	37400-67000	9000	2.8.2013	
2.2	Subject Matter Specialist	Sri. K.N. Jagadish	Agril. Extension	15600 -39100	6600	17.11.2009	
2.3	Subject Matter Specialist	Sri P.R.Ramesh	Soil Science	15600 -39100	6600	17.11.2009	
2.4	Subject Matter Specialist	Sri Prashanth J.M	Horticulture	15600 -39100	6600	24.11.2009	
2.5	Subject Matter Specialist	Sri B. Hanumanthe Gowda	Plant Protection	15600 -39100	6600	2.12.2009	
2.6	Subject Matter Specialist	Smt. Radha R.Banakar	Home Science	15600 -39100	6600	5.12.2009	
2.7	Subject Matter Specialist	Dr. Somashekhar	Plant Breeding	15600 -39100	6600	7.12.2009	
2.8	Programme Assistant	Sri K.N.Shashidhara	Crop Physiology	9300 -34800	4200	17.10.2012	
2.9	Computer Programmer	Smt. Jyoti Appu Naik	Inform.Science	9300 -34800	4600	30.9.2009	

2.10	Farm Manager	Sri H.D.Parashuram	Farm Manager	9300-34800	4600	25.7.2013
2.11	Accountant/Superintendent	Sri D.Krishnappa	Accounts	9300-34800	4600	2.5.2016
2.12	Stenographer	Smt. Veda Kurnalli	Stenographer	5200 -20200	2400	17.2.2010
2.13	Driver 1	Sri M.H.Ningappa	Tractor Driver	5200 -20200	2400	31.12.2009
2.14	Driver 2	Vacant	Jeep Driver	5200 -20200		
2.15	Supporting staff 1	Sri G.Manjanna	Supporting staff	5200 -20200	1800	1.11.2011
2.16	Supporting staff 2	Smt. S.Gangamma	Supporting staff	5200 -20200	2400	15.9.2016

## 3. Details of SAC meeting conducted during 2.2.2016

Sl. No	Date	Major recommendations	Status of action taken in brief	Tentativ e date of SAC meeting proposed during 2017-18
3.1	2.2.2016	<ol> <li>Off-campus Training         Programmes at NGO premises in the respective taluks need to be organized     </li> <li>Production of Arka Microbial Consortium (AMC) has to be increased to meet the high</li> </ol>	<ol> <li>A Training Programme on "Proper cultivation practices of Moringa" has been organized on 26.2.2016 at Balenahalli, Sirataluk in collaboration with mother NGO about 30 Moringa growers have participated.</li> <li>A project worth 4.8 lakhs has been established for Increased Production of Arka Microbial Consortium (AMC) with the support from NABARD.</li> </ol>	28.3.2017
		demand among farmers.  3. Malnutrition focused Kitchen garden programmes need to be organized.	<ol> <li>Awareness cum Training Programmes was organized on 4<sup>th</sup> March 2016. About 750 Rural Women from Tumakuru, Pavagada, Madhugiri &amp; Koratagere Taluks on the topic of Nutrition Garden.</li> <li>An FLD on control of Wild boar in KariyammanaPalya, Pavagada Taluk has been proposed &amp; accepted for the year 2016-17.</li> </ol>	

- farmers' fields.
- 5. Topics on safe use & disposal of plastic mulches in the farmers fields need to be included in the Awareness & Training programmes.
- Marketing linkage for Mangoes, Coconuts, Jack fruit products & Minor millets need to be given.
- Mango campaign / FLD covering all the technologies related to proper cultivation of Mangoes needto be organized.
- 8. Training Programmes on Organic farming, Non-pesticide management to be organized.
- Support to State Department of Agriculture for Soil sample analysis is sought.
- O. Technical Support to FPOs of NGOs & NABARD is necessary.

- 5. In the proposed FLD on ICM in Tomato, care has been taken to increase the polymuch thickness from 50 micron to 80 micron to avoid tearing of sheets & concerned Training will be given for safe disposal of them after use.
- 6. An EDP was taken to link the value added products of Jackfruit of Women SHG HalliSiri to market & the same has been approved for the year 2016-17. On 22<sup>nd</sup> Nov. 2016 Marketing day was arranged at Electronic City, Bengaluru for Ragi& Minor millets products.
- 7. A campaign programme on Production & Post Harvest Technologies of Mango as a part of ongoing FLD has been organized at Bukkapatna, SiraTaluk.
- 8. Periodic Training Programmeon Practices of Organic Farming are being organized by SMS, Soil Science.
- 9. About 10, 000 Nos. of Soil Samples are supposed to be analyzed at KVK for state Dept. of Agri. In the year 2016-17.
- 10. Support has alreadybeen extendedto two of FPOs (KasturiRangappaNayakaThotagarikaKrushiUthpannagalaSamaskaraneMattuMarata SowhardaSahakarai, SWAVALAMBI Agriculture Crop Producer Organisation) under OREDR NGO in SiraTaluk& an awareness cum interaction Programme on "Role of KVK in supporting FPOs"was organized on 24.2.2016 for the FPOs under DHAN foundation (Sira&PavagadaTaluks)

## 4. Capacity Building of KVK Staff

## 4.1. Plan of Human Resource Development of KVK personnel during 2017-18

Sl. No	New Areas of Training	Institution proposed to attend	Justification
4.1.1	Organic Farming practice in Agricultural &	UAS, GKVK, Bengaluru	To demonstrate Organic Farming
	Horticultural Crops		Technology in Farmers Field as FLD as
			well in KVK instructional Farm
4.1.2	Shaping the Future of Extension with Digital Media	MANAGE, Hyderabad	ICT for reliable source of dissemination in
			quick time.
4.1.3	Workshop on opportunities for youth in Agriculture	MANAGE, Hyderabad	Farmers doubling the income through
	Development		Agriculture Development
4.1.4	Food & Nutritional Security of the rural house holds	MANAGE, Hyderabad	To mitigate Malnutrition, Food & Nutrition
			insecurity in rural households
4.1.5	Advanced Food Processing Techniques in minor	CFTRI, Mysore	To upgrade the recent advances in millet
	millets		processing technology
4.1.6	Good management practices for arid horticultural	ICAR-Central Institute for Arid	To upgrade the recent advances in Drylland
	crops to combat current Agrarian Crisis.	Horticulture (CIAH), Bikaner	Horticulture Crops
4.1.7	Intellectual Property Rights in Agriculture	IARI, New Delhi	Protection of plant varieties of Farmers has
			gained importance in recent.
4.1.8	Varietal Vegetable Seed Production	IARI, New Delhi	To strengthen the farmers participatory
			vegetable seed production in KVK
4.1.9	Recent Advances in Integrated Pest Management	NCIPM, New Delhi	To acquaint with IPM technologies
4.1.10	Vertebrate Pest management	KAU, Kochi/NIPHM, Hyderabad	To know the recent advances inVertebrate
			Pest management

## 4.2. Cross-learning across KVKs during 2017-18

S. No	Name of the KVK proposed	Specific learning areas
4.2.1	Within ring –KVK, Ramanagar	Animal Husbandry, Farm Management, Solar Power
4.2.2	Within the zone - KVK Erode, Bidar	FPO, Precision Farming, Dryland Farming
4.2.3	Outside zone –KVK, Barapani	Eco Tourism, Agri Tourism

#### 5.Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources & activities during 2017-18

Sl. 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, Doddaballapur	Micronutrient Production, Arka Microbial	Information on Bio fuel
		Consortium	
5.2	KVK, Chitradurga	Seed Production techniques, Neem &	Value addition in minor millets
		Pongamia soap	
5.3	KVK, Ramanagar	Vegetable Seed Kit, Mango Fruit Fly Traps	Sericulture
5.4	KVK, Konehalli	Seeds, Seedlings & micronutrients	Minor Millets, Coconut Value addition
5.5	KVK, Chikkaballapura	Vegetable Special, Planting materials	IFS

## 6. Operational areas details proposed during 2017-18

Sl. No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)
6.1	Maize	Soil erosion, Early & mid season drought	28,204 ha	Kadaranahalli, Tanganahalli,	FLD, Trainings, Field day
6.2	Minor Millets	Lower income in Pigeon pea as a sole crop in rainfed condition. Pigeon pea is longer duration crop, prone to Biotic & Abiotic stresses leading to meager income. Interspace between rows of Pigeon pea underutilized for initial 70 days after sowing.	1,230 ha	Tanganahalli, Kadaranahalli, Balenahalli, Kariyammanapalya	Trainings
6.3	Pigeonpea	Use of local varieties High rate of Sterility Mosaic Disease (SMD) & wilt disease incidences resulted in reduced yield	9,206 ha	Tanganahalli, Balenahalli, Kariyammanapalya, Muthyalammanahalli	OFT,FLD, Trainings & Field Day
6.4	Groundnut	Tikka Disease, leaf minor, low income	78,050 ha	Kadaranahalli, Tanganahalli, Balenahalli,Kariyammanapalya, Muthyalammanahalli	FLD ,Trainings, Field Day

6.5	Tomato	Poor Soil & Nutrient Management, Water	562 ha	Kadaranahalli, Tanganahalli,	FLD ,Trainings,
		scarcity, Low keeping quality		Madde	Field Day
6.6	Onion	Climate change, Delayed rainfall, Non availability of Rabi variety, Poor storability	8,560 ha	Tippenahalli	OFT
6.7	Mango	Pre & Post harvest loss, High cost involved in ripening	6,848 ha	Kadaranahalli	FLD, Trainings, Field Day
6.8	Coconut	Monocropping, low nutrient status & low yield, button shedding, mites, stem bleeding, Ganoderma wilt, Pests	65,000 ha	Tanganahalli, Kadaranahalli,	FLD, Trainings, Field Day
6.9.	Musatard	Lack of suitable oilseed crop during Rabi season		Kadaranahalli, Tanganahalli	OFT
6.10.	Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield	650 ha	Kariyammanapalya, Mangalawada	FLD, Trainings, Field Day
6.11.	China Aster	Small size flowers, less shelf life & low yield	1,050 ha	Kadaranahalli, D.Nagenahalli, Durgadahalli	FLD, Trainings, Field Day
6.12.	Arecanut	Monocropping, Low soil fertility, AnabeRoga, Nut splitting, Low income	10,030 ha	Tanganahalli, Vaddarahalli, Durgadahalli	FLD , Trainings
6.13.	Agriculture & Horticulture Crops	Crop damage by wild boar, Low income	-	Kariyammanapalya,Tanganaha lli & Thippanahalli	FLD , Trainings
6.14.	French bean	Soil & PP related issues in Chemical farming	250 ha	Tanganahalli, Kadaranahalli,	FLD , Method Demonstration, Trainings & Field Day
6.15.	EDP-Dry Flowers	Lack of knowledge on dried flowers & Income generation activity	-	Muthyalammanahalli	EDP, Trainings
6.16.	Fruits & Vegetable Crops	Malnutrition, Non availability of Vegetables, Fruits, Higher Cost	-	Tanganahalli	FLD , Trainings, Field Day
6.17.	Brinjal	Poor decomposed litters, Low nutrient use efficiency & soil fertility, Severe incidence of wilt & lower yield	418 ha	Tanganahalli-Koratagere, Kadrenahalli, Duragadahalli - Tmk	FLD , Trainings, Field Day

## 7.Technology Assessment during 2017-18

S. No	Crop/ enterprise	Prioritized problem	Title of interventio n	Technology options	Source of Technolog y	Name of critical input	Qty per trial	Cost per trial (Rs.)	No. of trial s	Total cost for the interventi on (Rs.)	Parameter s to be studied	Team members
7.1	Mustard	Lack of suitable oilseed crop	Assessment of Mustard varieties as	Ground nut/Sunflowe r	UAS, Bengaluru					4,050	Growth parameters, Test	Somashekhar, Prashanth J.M. Radha Banakar
		during Rabi season	alternative Oilseed	Pusa -31/ NRCHB101	IARI, New Delhi	Pusa 31 Seeds	2 kg	450	3		weight, Yield, Oil Content (%)	P.R. Ramesh
			Crops	Pusa -28	IARI, New Delhi	Pusa 28 Seeds	2 kg	450				
				Pusa -25		Pusa 25 Seeds	2 kg	450				
7.2	Redgram	Higher disease	Assessment of Red	Local variety	_							
		incidence & reduced yield	ence & gram	BRG-5	UAS,	Seeds:BRG-5	5 Kg	500			Per cent disease &	BHGowda,
					Bengaluru	Neem cake	250- Nos.	5,000			wilt	Prashanth J.M., Somashekhar,
			& Higher Yield			AMC	5 Kg	600	3	36,600	incidence, Growth &	P.R. Ramesh
			Tield	GRG 811	UAS, Raichur	Seeds:GRG- 811	5 Kg 250-	500 5,000			yield parameters	
					Kaichui	Neem cake	Nos.	600				
7.3	Onion	Climata	Assessment	Bellary Red	Local	AMC	5 Kg		3	21,600	Duration,	Prashanth J.M.,
1.3	char Dela rain avai Rab & P	Climate change, Delayed rainfall, Non availability of	of Onion varieties	Arka Niketan	IIHR, Bengaluru	Seeds	1 Kg	2,400	3	21,000	Pod length, Disease &	Somashekhar, K.N.Jagadish,
			for Rabi	Bhima Shakti	DOG, Pune	Seeds:	1 Kg	2,400			Pest incidence,	P.R. Ramesh
		Rabi varieties & Poor storability	arieties	NHRDF Red L-28	NHRDF, Nasik	Seeds	1 Kg	2,400			No. of pods/plant & Yield	

## 8. Technology Refinement during 2017-18:Nil

S.No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	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
8.1				1								
				2								
8.2				1								
				2								
8.3				1								
				2								

## 9. Frontline Demonstrations during 2017-18

Sl.	Category	Crop/	Prioritized	Technology	Speci	Name of	Source of	Name of	Qty	Cost	No. of	Total	Paramete	Team
No.		enterprise	problem	to be demonstrate d	fy Hybr id or Varie ty	the Hybrid or Variety	Technology	critical input	per Demo	per Demo( Rs.)	Demo	cost for the Demo (Rs.)	rs to be studied	members
9.1	Cereals													
1.		Maize	Mid season drought, long dry spells & lower yield	Conservation Furrow (CF) as an in-situ Moisture conservation to combat mid season drought in Maize:CF is opened at every alternate row by using ridger	Variet y	Hema NAH - 1137	UAS, Bengaluru	Hiring of ridger-	0.5 ha	750	10	7,500	Growth parameter s, Cob size, Yield & economics	P.R.Ramesh, B.H.Gowda & Jagadish K N
9.2	Millets													
9.3	Oilseeds													

2.		Groundnut	Local/Exist ing varieties are low yielding. More Incidence of foliar diseases in local/existing varieties.	Enhancement of Groundnut yield under NMOOP: Demonstratio n of KCG-6 & K-6 Varieties	variet y	KCG-6	UAS, Bengaluru	Seeds	115Kg/ ha	4,000	50	2,00,000	Growth parameters, Test weight, Yield & Economics	Somashekhar, RadhaBanakar, P.R.Ramesh
9.4	Pulses	Pigeon pea	Local/Exist ing varieties are low yielding in rainfed situation & unable to sustain drought situation More Incidence of pest & diseases in local/existing varieties.	Enhancemen t of Pigeon pea yield through introduction of BRG – 5: Demonstration of BRG-5 Variety, use of foliar micronutrient, use of pheromone traps, use of neem soap, Use of sticky traps.	Variet y	BRG-5	UAS, Bengaluru	BRG-5 Seeds AMC Vegetable Special Neem Soap, Sticky traps, Pheromon e traps	4 Kg 1 Kg 2 Kg 2 Kg 4 Nos. 4 Nos.	3,000	50	1,50,000	Growth parameter s, Test weight, Yield & economics	Somashekhar, RadhaBanakar, B.H.Gowda
9.5	Commercial crops													
9.6	Horticultural crops													

	Fruits													
4.		Pomegran ate	Lack of awareness on application of nutrients Higher incidence of wilt & BLB, Reduced yield up to 30-50 %.	ICM in Pomegranate: INM & IPDM Package	Variety	Bhagwa	IIHR, Bengaluru	Neem Cake AMC Streptocyc line Blitox Carbendaz im	250 Kg 10Kg 375 gm 2.5 Kg 1 Kg	9,000	5	45,000	pH, OC, Major & Secondary & Micro nutrients	B.H.Gowda, P.R.Ramesh, J.M.Prashanth
5.		Mango	Lack of knowledge on production & post harvest technology	Improved Production practices & Post harvest management in Mango: Mango special, Fruitfly traps, Healer cum Sealer, Neem soap, Mango harvester, Ripening chamber	Variety	Alphonso	IIHR, Bengaluru	Mango special Fruit fly traps Sealer cum Healer Mango Harvester Ripening chamber	50 Kg 100 Nos. - 5	20,000	Grou ps	40,000	Yield & economics	Radha Banakar, P.R.Ramesh, Somashekhar, J.M.Prashanth, B.H.Gowda, K.N.Jagadish
	Flowers													
6		China Aster	Small size flowers & diameter, less shelf life, less attractive colour& low yield	ICM in China Aster:ARKA Kamini & Biofertilizers -AMC	Variet y	ArkaKa mini	IIHR, Bengaluru	Aster ArkaKami ni Seeds Bio fertilizers -AMC	150g /ha 1 Kg	1,900	5	9,500	Size, No. of Flowers/pl ant, Yield & Economic s	.M.Prashanth, Somashekhar& K.N.Jagadish

	Vegetables													
7.	9	Brinjal	Poor decompose d litters, Low nutrient use efficiency & soil fertility, Severe incidence of wilt & lower yield	Demonstration of ArkaActino-Plus (ACP) on Growth & Yield of Brinjal:Seed treatment with ACP- 10g/ 100g of seeds ACP- 20g/ litre of water & applied near root zone on 10 <sup>th</sup> DAT.	Hybrid		IIHR, Bengaluru	ArkaActin o plus	100 Kg	1,200	10	12,000	Growth parameter s, % disease incidence , Yield & economics	P.R.Ramesh J.M.Prashanth, B.H.Gowda, K.N.Jagadish
8.		French	Soil & PP related issues in Chemical farming	Demonstration of Liquid Organic farming practices in French bean: Seed treatment with Beejaamrutha, FYM-25 t/ha, N equivalent Compost-6t/ha, Jeevamrutha-2000 liter/ha.	Variet y	ArkaSuv idha	UAS, Bengaluru	Jaggery Dal powder Lime	60 Kg 60 Kg, 20 Kg	1,000	5	5,000	Growth parameters, Microbial studies, Pest & Disease Incidence, Yield & economics	P.R.Ramesh, J.M.Prashanth, K.N.Jagadish
9.		Tomato	Weed menace, Low nutrient use efficiency & low yield, Water scarcity in	ICM in Tomato: ArkaSamarat, AMC, Vegetable Special, PP Chemicals & use of polythene	variety	ArkaSa mrat	IIHR, Bengaluru	Seeds -100 AMC Vegetable Special Neem Soap Chlorothalo nil Polythene mulch (80	20gm 3 Kg 1 Kg 0.5Kg 250gm s	5,000	5	25,000	Growth parameters, No. of Fruits, Yield & Economics	Prashanth J.M., Somashekhar & K.N.Jagadish

			vegetables cultivation	mulch in tomato production				micron)	3roles					
10.		French bean- Arecanut intercroppi ng	Inefficient use of l&, weed menace, low soil fertility, lower income	Areca nut + French bean intercropping system	Variet y	ArkaSuv idha	CPCRI/ CHES Hirehalli	ArkaSuvid ha seeds Soil sample Analysis	8 kg 5 Nos.	2,200	5	11,000	No of pods /plant, Green Pod yield/plant , Yield ( t/ha) of main & intercrop	Prashanth J.M., Somashekhar & K.N.Jagadish
11.		Fruits & Vegeta bles	Lack of knowledge on cultivation of vegetables crops in small area & high cost of vegetables & fruits.	Nutrition garden in Schools	-	-	UAS, Bengaluru	Vegetable seed kit Seedlings of Mango, Sapota, Papaya Drumstick , Lemon, Guava, Curry leaf, Coriander Chakramu ni Polyethene bags, AMC, Vegetable Special, Neem & Pongamia Soap	2 Nos.	3,000	5	15,000	Yield,Ave rage Vegetable productio n per day, Cost of savings through nutritional garden.	Radha.Banakar, Somashekhar
9.7	Livestock													
9.8	Fisheries													
9.9	Plantation													

	Crops													
12.		Coconut	Monocropp ing, low nutrient status & low yield, button shedding, mites, stem bleeding, ganoderma wilt	ICM in Coconut:Nee m cake-5kg per tree, French bean seeds-10kg/ acre, RDF- Gypsum-1kg/ tree, COC- 10g per lit water, Hexoconazol e -3 ml per 100ml water & Pheromone traps	Varie ty	Arasiker eTall	UAS, Bengaluru	Neem cake-5kg per tree, French bean seeds, Gypsum- COC  Hexocona zole & Pheromon e traps	5 Kg per tree 10Kg/ acre 1Kg/ tree 10g per lit water, 3 ml per 100 ml water	3,000	10	30,000	Nutrient Status, Yield, % disease incidence	P.R.Ramesh, B.H.Gowda, J.M.Prashanth
9.10	Others													
13.		Wild Boar	Heavy damage due to wild boar Disturbing & uprooting of Groundnut plants	Management of Wild Boar in Farming system:Tying of old coloured cloth pieces around the field. Installation modified Nylon net Installation of Borep- Wild bore repellent			KAU, Thrissur	Nylon net- 8 Kgs Borep- Wild boar repellent	1 No.	6,400	5	32,000	Percentage of damage, Yield loss	B.H.Gowda, J.M.Prashanth
	EDP													
1.		Dry Flower s	Lack of knowledge on dried flowers &	Preparation of dried flower products			IIHR, Bengaluru	Silica gel, other items (craft	1 kg 1 set	10,000	02 SHG 's	20,000	Cost of production, Income	RadhaBanakar, Somashekhar, K.N.Jagadish

	Income generation activity.			papers, Needles, glue stick, blotting			
				sheet,			
				forceps			

## 10.Trainingfor Farmers/ Farm Women during 2017-18:

Sl.No.	Thematic area	Crop / Enterprise	Major problem	Related field interventio n (OFT/FLD)	Training Course Title**	No. of Cours es	Expected No. of participant s	Names of the team members involved
10.1	Crop Production							
1		Onion	Lack of quality seeds	-	ICM in Onion	1	30	Somashekhar, J.M.Prashanth
2		Redgram	Use of local seeds, lack of knowledge about productions practices	OfT, FLD	Improved production technology for red gram,	2	60	Somashekhar
3		Groundnut	Use of old variety, susceptible to foliar diseases resulting in low yield	FLD	Integrated Crop Management in Groundnut	1	30	Somashekhar, P.R.Ramesh
10.2	Horticulture Production							
1		Vegetable crops	Lack of knowledge on improved technology in vegetables	-	Precision farming	1	30	Prashanth J.M., P.R.Ramesh & Somashekhar
3		Arecanut	Monocropping, water scarcity & nut splitting	FLD	Production practices in Arecanut	1	30	P.R.Ramesh& Prashanth J.M
4		Flowers	Local varieties & low yield	FLD	Production practices of Commercial flowers	1	25	Prashanth J.M & K.N.Jagadish
6		Dry landHort	Drought, low soil fertility & low yield	-	Dry land horticulture	1	30	Prashanth J.M., P.R.Ramesh& K.N.Jagadish

7		IFS	Non sustainability in farming	-	Importance of Horticulture in IFS	1	30	Prashanth J.M & P.R.Ramesh
10.3	Livestock Production							
1		Fodder crops	Low yield	-	Recent technologies in forage crops	1	30	Somashekhar Radha Banakar P.R.Ramesh& K.N.Jagadish
10.4	Home Science							Ü
1				OFT	Nutrition garden in Schools	1	30	Radha Banakar & Somashekhar
10.5	Plant Protection	Coconut	Budrot, Stem bleeding	FLD	IPDM in Coocnut	1	30	B.H Gowda, P.R. Ramesh &K.N.Shashidhar
1		Mango	Powdery Mildew , Hoppers Fruit fly, Stem borer	-	IPDM in Mango	1	30	B.H Gowda, P.R. Ramesh &K.N.Shashidhar
2		Redgram	Severe wilt, SDM & fruit borer	OFT	IPDM in Redgram	1	30	B.H Gowda, P.R. Ramesh &K.N.Shashidhar
3		Pomegranate	Wilt, Bacterial blight	FLD	Pest & Disease management in Pomegranate	1	30	B.H Gowda, P.R. Ramesh & Prasanth JM
4		Horticulture crops	Wild boar problem	FLD	Wild boar management	1	30	B.H Gowda, P.R. Ramesh &Prasanth JM
		Groundnut	Pest & Disease	-	IPDM in Groundnut	1	30	B.H Gowda
10.6	Production of Inputs at Site							
10.7	Soil Health & Fertility							
1	,	Maize	Low Moisture, drought situation	FLD	Soil Conservation	1	30	P.R.Ramesh, Somashekhar
2		Brinjal	Low nutrient use efficiency	FLD	Use of Arkaactino plus	1	30	P.R.Ramesh , K.N. Jagadish& K.N.Shashidhar
3		Coconut	Soil degradation , water runoff	FLD	Soil & water conservation	1	30	P.R.Ramesh , K.N.Jagadish

4		Soil Health Management	Poor soil health	-	Organic farming in horticulture crops	1	30	P.R.Ramesh& K.N.Jagadish
5		Frenchbean	Poor nutrient status	FLD	Importance of Soil & water testing & Organic Farming	1	30	P.R.Ramesh, K.N.Jagadish & K.N.Shashidhar
10.8	PHT & value ad	ldition						
1		Processing & Value addition	Lack of knowledge on Post harvest technology & Mal nutrition	FLD	Processing & value addition in Horticultural Crops	1	30	Radha Banakar & Somashekhar
2		Mango	Lack of knowledge on PHT	FLD	Demonstration on Mango harvester, low cost ripening chamber & packing	1	30	Radha Banakar & Somashekhar K N jagadish
		IGA	Unemployment, Lack of knowledge on value addition, Processing &br&ing	-	Processing & value addition in minor millets	1	30	Radha Banakar & Somashekhar
10.9	Farm Mechanization							
10.10	Fisheries Production Technologies							
10.11	Mushroom production	-						
10.12	Agro forestry							
10.13	Bee Keeping							
10.14	Sericulture							
10.15	Others, pl. specify							

## 11. Training for Rural Youth during 2017-18

Sl.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
11.1	Crop Production							
11.2	Horticulture Production	Vegetables	Low quality production & low income	-	Precision Farming in Horticultural Crops	1	30	Prashanth J.M. P R Ramesh & K.N.Jagadish
11.3	Livestock Production			-				
11.4	Home Science							
11.5	Plant Protection							
11.6	Production of Inputs at Site	Vermi compost	Low nutrient status, imbalanced nutrition	-	Method of VermicompostProduction	1	30	P.R.Ramesh K.N.Jagadish& K.N.Shashidhar
11.7	Soil Health & Fertility							
11.8	PHT &Value Addition	Ragi	Lack of knowledge on processing & value addition	-	Processing &Value Addition to Ragi	2	50	Radha.Banakar, Somashekhar & P.R.Ramesh
11.9	Capacity Building Group Dynamics							
11.10	Farm Mechanization							
11.11	Fisheries Production Technologies							
11.12	Mushroom production	Mushroom	Lack of Awarness on Mushroom Cultivation	OFT	Mushroom Cultivation	1	30	Radha R. Banakar Dr. Somashekhar
11.13	Agro forestry							
11.14	Bee Keeping							
11.15	Sericulture							
	Others, pl. specify							

## 12. Training for Extension Personnel during 2017-18

Sl.	Thematic area	Training Course Title**	No. of	Expected No. of	Names of the team members
No.			Courses	participants	involved
12.1	Crop Production	Seed Production in Vegetables	1	20	Somashekar & Prashanth JM
12.2	Home Science	Health & Nutrition	1	20	Radha Banakar & Somashekar
		IGA for SHG groups	1	20	Radha Banakar & Somashekar
12.3	Capacity Building & Group Dynamics				
12.4	Horticulture	Use of Arkaactino plus	1	20	P R. Ramesh, Prashanth J M
					&K.N.Jagadish
		Micronutrient management in	1	20	P R. Ramesh, Prashanth J M &
		Horticulture crops			K.N.Jagadish
12.5	Livestock Production &				
	Management				
12.6	Plant Protection	IPDM in Coconut	1	20	B.H Gowda, P.R. Ramesh &
					Shashidhar.K.N
		IPDM in Paddy	1	20	B.H Gowda, P.R. Ramesh &
					Shashidhar.K.N
12.7	Farm Mechanization	-			
12.8	PHT & value addition				
12.9	Production of Inputs at Site				
12.10	Sericulture				
12.11	Fisheries				

## 13. Vocational Trainings during 2017-18:

Sl.No.	Thematic area & the Crop/Enterprise	Training title*	No. of programmes & Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participants	Sponsoring agency if any	Names of the team members involved
13.1	Crop Production						
13.2	Home Science						
13.3	Horticulture	Propagation Techniques in Fruit Crops	1(3)	Youth	20	Dept. of Horticulture	Prashanth JM & K.N.Jagadish
13.4	Livestock Production & Management						
13.5	Plant Protection	Mass production of Trichdermaharizianum	1(3)	Youth	20	-	B.H Gowda, P.R. Ramesh & Prasanth JM
13.6	Farm Mechanization						
13.7	PHT & value addition	PHT in horticultural crops	1(5)	SHGs	20	-	Radha Banakar, Somashekhar
13.8	Production of Inputs at Site	Production technology of Vermi Compost	1(3)	Youth	20	-	P.R. Ramesh & K.N.Jagadish
13.9		Honey bee keeping	1(3)	Youth	20	-	P.R. Ramesh & K.N.Jagadish
13.10	Sericulture						
13.11	Fisheries						
13.12	Mushroom Production	Mushroom Cultivation & Value addition	1(3)	Youth	20-		Radha Banakar, Somashekhar

14. SponsoredTrainings during 2017-18:

Sl.No.	Thematic area & the Crop/Enterprise	Training title	No. of programmes & Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participants	Sponsoring agency	Names of the team members involved
14.1	Crop Production						
14.2	Home Science	Nutrition garden	1(1)	SHGs, Women	30	Agriculture Dept.	Radha Banakar & Somashekar
14.3	Capacity Building & Group Dynamics						
14.4	Horticulture						
14.5	Livestock Production & Management						
14.6	Plant Protection						
14.7	Farm Mechanization						
140	PHT & value addition	Processing & Value addition of Horticultural Crops	1(1)	SHGs	30	Dept. of Horticulture	Radha Banakar & Somashekar
14.8		Value addition to minor millets	1(1)	SHGs, Women	30	Agriculture Dept.	Radha Banakar & Somashekar
14.9	Production of Inputs at Site	Organic farming practices	1 (1)	Youth	30	Horticulture & Agriculture Dept.	P R. Ramesh & K.N.Jagadish
14.10	Sericulture						
14.11	Fisheries						

## 15. Extension programmesduring 2017-18

Sl.No.	Extension programme	No. of programmes or activities	Expected No. of participants	Names of the team members involved
15.1	Advisory Services	140	800	All SMS
15.2	Diagnostic visits	35	185	B.H Gowda, Prashanth JM PR.
		33		Ramesh,K.N.Jagadish & Somashekar
15.3	Field Day	10	850	All SMS
15.4	Group discussions	8	140	All SMS
15.5	Kisan Ghosthi	01	400	All SMS
15.6	Film Show	06	200	All SMS
15.7	Self -help groups	10	150	K.N.Jagadish & Radha Banakar
15.8	KisanMela	01	500	All SMS
15.9	Exhibition	10	2000	K.N.Jagadish
15.10	Scientists' visit to farmers field	20	120	All SMS
15.11	Plant/Soil health/Animal health camps	05	1000	Prashanth JM P R. Ramesh
		03		B. H Gowda, K.N.Jagadish & Somashekar
15.12	Farm Science Club	-	-	-
15.13	Ex-trainees Sammelan	-	-	-
15.14	Farmers' seminar/workshop	1	100	All SMS
15.15	Method Demonstrations	10	200	All SMS
15.16	Celebration of important days	3	200	All SMS
15.17	Special day celebration	5	150	All SMS
15.18	Exposure visits	4	100	K.N.Jagadish
15.19	Technology week	1	500	K.N.Jagadish
15.20	FFS	-	-	-
15.21	Farm innovators meet	1	100	All SMS
15.22	Awareness programs	2	100	All SMS
15.23	Others, pl. specify	60	2400	All SMS
	Lectures delivered	00		All SWS

## 16. Activities proposed as Knowledge & Resource Centre during 2017-18:

## 16.1 Technological knowledge

Sl.No.	Category	Details of Technologies	Area (ha)/ Number	Names of the team members involved
16.1.1	Technology Park/ Crop cafeteria	Display of Agri-Horti Technologies through Demonstrations in KVK Farm	0.4 ha	PC, Farm Manager Somashekhar JM Prashanth. P.R. Ramesh,BHGowda, K.N.Jagadish Radha R Banakar
16.1.2	Démonstration Unit	<ul> <li>PrecisionFarming</li> <li>VAM Production unit</li> <li>Arka CocopeatProduction Unit</li> <li>Terrace Gardening</li> </ul>	3 Nos.	KVK, Team, Hirehalli
16.1.3	Lab Analytical services	SWTL-Mini Lab	1	P.R. Ramesh
16.1.4	Technology Week	<ul> <li>Seed Production Techniques</li> <li>Propagation Techniques in Horticulture Crops &amp; Farm Mechanization</li> <li>Bio Pesticides &amp; Bio Control Agents</li> <li>Bio Fertilizers &amp; Micronutrients &amp; Organic farming practices</li> <li>Value Addition in Food Crops</li> <li>New Technologies of IIHR</li> </ul>	1	KVK, Team, Hirehalli

## **16.2 Technological Products**

Sl.No.	Category	Name of the Production Partner Agency, if any	Name of the product	Quantity (q)/ Number planned to be produced during 2017-18	Names of the team members involved	
16.2.1			Vegetable varieties	792 Kg		
			Ragi	500 Kg	Dr. Somashekar, Prashanth	
	Coods		Fox tail millet	200 Kg	JM, PR Ramesh,	
	Seeds		Redgram- BRG5	200 Kg	Parashuram,	
			Mushroom Spawn	1,000 Kg	Radha R. Banakar	
			Vegetable Seed Kit	5,000 Nos.		
16.2.2	Planting materials		Mango, Guava, Arecanut, coconut, Tamarind Jamoon,	1.01 Lakhs	Prashanth JM , Somashekar, PR Ramesh,	
			Lime Vegetables seedlings		KN Jagadish&Parashuram	
16.2.3	Bio-products		Fruit fly trap,	5,000 Nos.	P.R Ramesh,	
			Sealer cum Healer	1 ton	B.H.Gowda	
			Neem & Pongamia Soap	3 ton	Shashidhar.K.N	
			Arka Microbial Consortium	5 ton	PR Ramesh & B.H.Gowda	
16.2.4	Livestock strains					
16.2.5	Fish fingerlings					
16.2.6	Other Products		AmlaValue Added Products	Juice-1000 ltrs Candy-200 Kg	Radha R. Banakar	
			Ragi value added products	Ragi Malt- 100 Kg		
16.2.7			Banana Special	4 ton	PR	
	Micronutrient Products		Vegetable Special	3 ton		
	Micronutrient Products		Mango Special	2 ton	Ramesh, Hanumanthegowda	
			Citrus special	1 ton	& ShashidharaK.N	

## 16.3 Technological Information

	Category	Technological capsules / Number	Names of the team members involved
16.3.1	Technology backstopping to line departments		
	Agriculture	Bio Pesticides, Bio control agents & Bio fertilizers	Ramesh P.R. & BH Gowda
	Horticulture	Seed to Seed in French Bean, Okra, Onion Propagation Techniques in Horticulture Crops, High Density planting in Horticulture Crops, Micronutriments in Horticulture Crops, Protected Cultivation	Dr. Somashekar & Prashanth J.M. Ramesh P.R
	Animal Husb&ry	-	-
	Fisheries	-	-
	Agricultural Engineering	-	-
	Sericulture	-	-
	Others, pl. specify		
16.3.2	Literature/publication	15	
16.3.4	Electronic Media	05	
16.3.5	Kisan Mobile Advisory Services	30	KVK, Team
16.3.6	Information on centre/state sector schemes & service providers in the district.	-	

## 17. Additional Activities Planned during 2017-18

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	CRIDA, Hyderabad	Technology demonstration component - NICRA	<ul> <li>Farm ponds -12 Nos.</li> <li>Institutional arrangements- 02</li> <li>Crop production -80 ha</li> <li>Dry land Horticulture -10 ha</li> <li>Leveling -2ha</li> <li>Trench cum bunding -2 ha</li> <li>NRM Works -5 ha</li> </ul>	15 Lakhs	PC, P.R.Ramesh
17.2	NABARD, Tumakuru	Establishment of Arka Microbial Consortium Production Unit	• Production of AMC- 2 tons/year	4.8 Lakhs	PC, P.R.Ramesh,
17.3	ZP, Tumakuru	Empowerment of Rural Women Groups through Nutrition Gardening	<ul> <li>Vegetable Seed Kit- 1000 Nos.</li> <li>+ AMC- 500 Kg + Vegetable</li> <li>Special-500 Kg + Neem</li> <li>Soap-500 Kg</li> </ul>	10Lakhs	PC, Radha Banakar, Somashekhar, P.R. Ramesh, B.H.Gowda
17.4	CRIDA, ICAR, GOI	Conservation Agriculture	• Green Manuring-2 ha, Conservation equipments.	0.5 Lakhs	PC, P.R.Ramesh
17.5	MANAGE, Hyderabad	DAESI Programme	• Trainings, Field Visits, Exposure Visits	8.0 Lakhs	PC, KN Jagadish

## 18. Revolving Fund

#### **18.1 Financial status**

Opening balance as on 01.04.2016 (Rs.in Lakh)	Expenditure incurred during 2016- 17 (Rs.in Lakh)	Receipts during 2016-17 (Rs.in Lakh)	Closing balance as on 31.01.2017 (Rs.in Lakh)	Expected closing balance by 31.03.2017 (Including value of material in stock/ likely to be produced)
40,47,710	46,15,679	56,51,950	50,83,982	54,00,000

## 18.2 Plan of activities under Revolving Fund

Sl.No.	Proposed activities	Expected output	Anticipated income (Rs. In Lakhs)	Names of the team members involved
18.2.1	Seed Production Vegetable Seed Kit	1,692Kg&5,000 Nos.	13.48	Somashekhar, Prashanth J.M.
18.2.2	Planting material Production	1.01 Lakhs Seedlings	23.3	Prashanth J.M.,K.N.Jagadish & Somashekhar,
18.2.3	Arka Microbial Consortium	2,000 Kg	23.5	P R Ramesh & BH Gowda
18.2.4	Micronutrient Special	9,000 Kg		P R Ramesh & BH Gowda
18.2.5	Soil, Water & Leaf Analysis	6,000 Nos.	7	P R Ramesh & BH Gowda
18.2.6	Neem&Pongamia Soap& Healer cum Sealer	4,000 Kg	7	B.H Gowda , P R Ramesh, Shashidhar K.N
18.2.7	Mango fruit fly trap	5,000 Nos.	5	B.H Gowda, PR Ramesh, Shashidhar K.N
18.2.8	Mushroom Spawn	1,000 Kg	2.1	Radha R. Banakar, Somashekhar
18.2.9	Amla Juice/C&y	1,000 lts/200 Kg		Radha R. Banakar, Somashekhar
18.2.10	Ragi Malt	100 Kg		Radha R. Banakar

19. Activities of soil, water & plant testing laboratory during 2017-18

Sl.No.	Туре	No. of samples to be analyzed	Names of the team members involved
19.1	Soil	3,000	P.RRamesh, & Shashidhar K.N
19.2	Water	2,500	P.RRamesh & Shashidhar K.N
19.3	Plant	500	P.RRamesh, B.H.Gowda,&Shashidhar K.N
19.4	Others		

20. E-linkage during 2017-18

Sl. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
20.1	-	-	-
20.2	-	-	-
20.3	Any other (Please specify)	-	-

21.Activities planned under Rainwater Harvesting Scheme (only to those KVKs which are already having scheme under Rain Water Harvesting)

Sl. No	Activities planned	Remarks if any
21.1	-	-
21.2	_	-

#### 22.Innovator Farmer's Meet

Sl.No.	Particulars Particulars	Details
22.1	Are you planning for conducing Farm Innovators meet in your district?	No
22.2	If Yes likely month of the meet	
22.3	Brief action plan in this regard	

## 23.Farmers Field School (FFS) planned

Sl. No	Thematic area	Title of the FFS	Budget proposed in Rs.
23.1	Plant Protection	ICM in Chilli	30,000

## $\textbf{24.Budget - Details of budget utilization (2016-17) upto } \textbf{31}^{st} \textbf{ January 2017}$

(Rs.)

Sl.					
No.	Particulars	Sanctioned	Released	Expenditure	
24.1	Recurring Contingencies				
24.1.1	Pay & Allowances	1,07,37,000		99,00,294	
24.1.2	Traveling allowances	1,50,000		95,701	
24.1.3	Contingencies				
24.1.4.	Stationery, telephone, postage & other expenditure on office running, publication of Newsletter &				
A	library maintenance	3,00,000		2,98,867	
В	POL, repair of vehicles, tractor & equipments	3,00,000		1,94,243	
С	Meals/refreshment for trainees	1,00,000		74,210	
D	Training material	50,000	96,77,102	50,000	
Е	Frontline demonstration except oilseeds & pulses + NFSM	2,44,000		1,93,140	
F	On farm testing	66,000	90,77,102	32,313	
G	Training of extension functionaries	50,000		28,000	
Н	Maintenance of buildings	1,00,000		28,444	
I	Establishment of Soil, Plant & Water Testing Laboratory	50,000		49,800	
J	Library	5,000		0	
K	Extension Activities	25,000		23,665	
L	Integrated Farming System	30,000		0	
M	Farmer's Field School	30,000		29,699	
N	EDP/Innovative activities	30,000		30,000	
О.	Display Boards	10,000		10,000	

24.1	Total Recurring	1,22,77,000	1,10,28,376
24.2	Non-Recurring Contingencies		
24.2.1	Works		
a.	Demo Units -2 Nos.	8,00,000	8,12,663
b.	Repairs & Renovation	4,00,000	
24.2.2	Equipments including SWTL & Furniture		
a.	Office Automation	3,00,000	1,47,840
b.	Furnitures& Fixtures	3,00,000	1,00,000
24.2.3	Vehicle (Four wheeler/Two wheeler, please specify)		
24.2.4	Library		
24.2	TotalNon Recurring	18,00,000	10,60,503
24.3	REVOLVING FUND	140.77	
24.4	GR& TOTAL (A+B+C)	1,40,77,000	1,20,88,879

## 25.Details of Budget Estimate (2017-18) based on proposed action plan

Sl.	Particulars	BE 2017-
No.	Farticulars	18proposed (Rs.)
25.1	Recurring Contingencies	1,50,00,000
25.1.1	Pay & Allowances	1,50,000
25.1.2	Traveling allowances	
25.1.3	Contingencies	
A	Stationery, telephone, postage & other expenditure on office running, publication of Newsletter	5,00,000
В	POL, repair of vehicles, tractor & equipments	4,00,000
С	Meals/refreshment for trainees (@Rs.75/day/trainee for residential & @ Rs.40/day/trainee for non-residential trainings)	1,50,000
D	Training material (need based materials & equipments for conducting the training)	1,00,000
E	Frontline demonstration (excluding NFSM & NMOOP)	2,51,500
F	On farm testing (on need based, location specific & newly generated information in the major production systems of the area)	82,500
G	Integrated Farming System (IFS)	50,000
Н	Training of extension functionaries	50,000
Ι	Extension Activities	50,000
J	Farmers' Field School	30,000
K	EDP/ Innovative Activities	30,000
L	Soil & Water Testing & Issue of Soil Health Cards	1,00,000
M	Display Boards	1,00,000
N	Maintenance of building	5,00,000
0	Library (Purchase of Journal, Periodicals, News Paper & Magazines)	10,000
P	FLDs under NFSM & NMOOP	3,50,000

25.1	TOTAL Recurring Contingencies	1,75,70,000
25.2	Non-Recurring Contingencies	
25.2.1	Works	1,00,00,000
25.2.2	Equipments & Furniture	
a.	Office Automation	5,00,000
b.	Furniture	6,00,000
25.2.3	Vehicle (Mini Tractor)	5,00,000
25.2.4	Library (Purchase of assets like books & journals)	50,000
25.2	TOTAL Non-Recurring Contingencies	1,16,50,000
25.3	REVOLVING FUND	-
25.4	GRAND TOTAL	2,92,20,000

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