ICAR-ATARI, ZONE-XI, HEBBAL, BENGALURU

ACTION PLAN 2019-20

ICAR-TARALABALU KRISHI VIGYAN KENDRA, DAVANAGERE

1. General information about the Krishi Vigyan Kendra

1.1	Name and address of KVK with phone, fax and e-	:	ICAR-Taralabalu Krishi Vigyan Kendra			
	mail ID		Kadalivana, LIC Colony Layout, BIET College Road,			
			DAVANAGERE-577004, Karnataka			
			Phone : 08192-263462, 297142			
			E-Mail : dvgtkvk@yahoo.com, kvk.Davanagere@icar.gov.in			
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		www.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 & Head	Dr. Devaraja T.N.	Fishery	37400-67000 PB-4	10000	17-05-2005	Permanent
2.2	Subject Matter Specialist	Mr. Basavanagowda M.G.	Horticulture	15600-39100 PB-3	6600	21-11-2006	Permanent
2.3	Subject Matter Specialist	Mr. Mallikarjuna B.O.	Agronomy	15600-39100 PB-3	6600	09-01-2008	Permanent
2.4	Subject Matter Specialist	Dr. Jayadevappa G.K.	Animal Science	15600-39100 PB-3	6600	29-01-2008	Permanent
2.5	Subject Matter Specialist	Mr. Raghuraja J.	Agri. Extension	15600-39100 PB-3	6600	23-06-2008	Permanent
2.6	Subject Matter Specialist	Vacant	Plant Protection	15600-39100 PB-3	5400		Vacant
2.7	Subject Matter Specialist	Mr. H.M. Sannagoudra	Soil Science	15600-39100 PB-3	5400	01-07-2013	Permanent
2.8	Programme Assistant	Mr. Revanasiddappa	Lab. Technician	9300-34800 PB-2	4200	11-04-2012	Permanent
	(Lab Assistant)	G.B.P.					

2.9	Programme Assistant	Mr. Santhosh B.	Computer	9300-34800 PB-2	4600	05-09-2008	Permanent
	(Computer Programmer)						
2.10	Programme Assistant	Mr. Vijayakumar S.B.	Farm Manager	9300-34800 PB-2	4200	23-06-2008	Permanent
	(Farm Manager)						
2.11	Assistant	Mr. Mallikarjuna S.	Administration	9300-34800 PB-2	4600	01-06-2005	Permanent
		Gudihindala					
2.12	Stenographer	Smt. Mamatha H.	Administration	5200-20200 PB-1	2800	27-06-2005	Permanent
		Melmalagi					
2.13	Driver 1	Mr. Marulasiddaiah N.M.	Jeep	5200-20200 PB-1	2400	01-06-2005	Permanent
2.14	Driver 2	Mr. Shivakumar S.	Tractor	5200-20200 PB-1	2400	01-06-2005	Permanent
2.15	Supporting staff 1	Mr. Shivakumar B.	Office Attendant	5200-20200 PB-1	1900	01-06-2005	Permanent
2.16	Supporting staff 2	Mr. Shivakumar S.E.	Farm Attendant	5200-20200 PB-1	1900	01-06-2005	Permanent

3. Details of SAC meeting conducted during 2018-19

Recommendations of 16th SAC meeting held on 18-12-2018

Group-I: To be addressed at KVK level

- 1. To go for rapid multiplication method for production of quality planting material in Pepper.
- 2. To involve farmers in vegetable seed production and to study Krishi Vigyan Kendra Thrissur Women Groups in this regard.
- 3. To collect the demand and supply statistics for Onion before season.
- 4. To promote dry fodder enrichment before feeding to animals.
- 5. To use least cost seed formulation while preparing compounded feeds at house hold level.
- 6. To use media properly to give wide publicity for successful technologies.
- 7. To promote Arka Microbial Consortium (IIHR, Bengaluru) for wilt problems.

Group-II: To be addressed through action plan of KVK in the year 2018-19

- 1. Develop District Crop Plan and Strategy documents and appraise District Commissioner.
- 2. Need to minimize use of weedicides in Arecanut.
- 3. To promote fish seeds production through farmers entrepreneurship which helps to scale up fisheries activities in the distinct.
- 4. To promote small ruminants rearing among small and marginal farmers and use crop residue efficiently.

Group-III : To be addressed through convergence with Development Departments

- 1. Direct Dry Seeded Rice (DSR) method of Paddy cultivation should be promoted in the entire district.
- 2. Alternate crops in place of Maize should be promoted through farmers awareness programmes and Media should be used effectively for this purpose.
- 3. Establishment of small minor millet processing and packing units and Groundnut Oil extraction units in Jagalur tq.
- 4. To start model nursery for production and supply of Pepper Seedlings.
- 5. Onion seeds (Good Quality) should be made available to farmers.
- 6. To identify lacunae in PMFBY and inform the problems faced by farmers to authorities.
- 7. To promote ripening chambers in Mango through Horticulture Department.
- 8. To facilitate one or two stalls in APMC for FPOs.
- 9. To include fisheries components in IFS model by earmarking 15 % area in the farmers.
- 10. To organize training for bank AEO's on latest Agricultural Technologies. Important tips on Agricultural Technologies to be broadcasted through AIR.

4. Details of operational areas proposed during 2019-20

Clusters	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise that limit yield and income	Extent of area (ha/No.) affected by the problem in the village	Proposed intervention (OFT, FLD, Training, extension activity etc.)
1	2	3	4	5
Agasanakatte Davanagere taluk	Maize + Redgram	 Low yield No intercrop Cob worm incidence Army worm and fall army worm Use of old varieties like Hy 3c, TTB-7 and long duration 	175 ha	 FLD - Intercropping of pulses with (Redgram BRG-5) in Maize Training Importance of seed treatment for higher yield in intercropping system Integrated pest management in Maize + Redgram Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities

Tomato	• Low yield	25 ha	• Training
	Poor water management		- Production technology
	• No IPDM practices		- IPDM practices
	• Improved hybrids are not cultivated		 Method demonstrations
	I to be get a set of the set of t		- Seed treatment with biofertilizers
			- Installation of pheromone traps
			Extension activities
			Marketing & value addition
Arecanut	Low yield	40.5 ha	FLD - Integrated Pest and Disease
	 Inflorescence die back 		Management in Arecanut
	• No intercrops in Arecanut		• Training
	L L		- Production technology of Arecanut
			Method demonstrations
			- Method of placing fertilizers
			- Foliar spray of micronutrients
Doiming	• Low mills viold	138 No.	Extension activities
Dairying	Low milk yieldScarcity of good quality fodderDealyed puberty	138 No.	 Training Use of Non-protein nitrogenous (NPN) substances in reducing the feeding cost in dairy animals Importance of colostrums and milk feeding to crossbred female calves
			 Method demonstrations Dry fodder enrichment & feeding along with grain mixture Silage making methods
			- Azolla production
			Extension activities
Sheep and goat	• Lower body weight gain	45 No.	Training
	• Under nutrition		- Effect of total deworming and
	Worm infestation		balanced nutrition in small ruminants
			Method demonstrations
			- Preparation of compounded feeds for
			sheep Extension activities
IFS	Mono cropping systems		Extension activities Dryland IFS system – 10,000/-
11.2	Mono cropping systems		Di yianu ir 5 system – 10,000/-

1	2	3	4	5
Ramathirtha Harihara taluk	Rice	 Low yield BPH, Sheath blight and blast Tail enders 	30 ha	 Training IPM for the stem borer and BPH Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
	Maize	 Low yield No intercrop with redgram Stem borer and doweny mildew Incidence of fall army worm 	130 ha	 FLD - Intercropping of pulses with (Redgram BRG-5) in Maize Training Importance of seed treatment for higher yield in intercropping system Integrated pest management in Maize + Redgram Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
	Arecanut	 Red mites in small plants Incidence of Hidimundige Incidence of nut splitting 	15 ha	 Training Production technology of Arecanut Method demonstrations Method of placing fertilizers Foliar spray of micronutrients Extension activities
	Betelvine	 Foot rot Downey mildew Scales, root grub and leaf curl Powdery mildew 	30 ha	 FLD – Wilt management in Betelvine Training Recent trends in production technology of betelvine Method demonstrations Drenching of AMC Lowering of vines Extension activities
	Dairying	 Low yield Infertility & repeat breeding Mastitis 	197 No.	 FLD – Feeding dairy animals based on Indian standards for better performance Training Use of Non-protein nitrogenous (NPN) substances in reducing the feeding cost in dairy animals

			 Importance of colostrums and milk feeding to crossbred female calves Method demonstrations Dry fodder enrichment & feeding along with grain mixture Silage making methods Azolla production Extension activities
Sheep & goat rearing	Lower body weight gainWorm infestation	89 No.	 Training Effect of total deworming and balanced nutrition in small ruminants Method demonstrations Preparation of compounded feeds for sheep Extension activities
Fodder	Low yieldPalatability problems	2 ha	 Training Hydroponic fodder production technology Method demonstrations Preparation of fodder using hydroponic Extension activities
Fisheries	• No fish culture		 FLD - Integrated management of fish culture in ponds Training Principles of fish farming Method demonstrations Feed formulation Extension activities
IFS	 Mono cropping systems 		Irrigated IFS system – 10,000/-

1	2	3	4	5
Kadaranahalli Channagiri taluk	Rice	 Water scarcity (Tail end village) BPH, Sheath blight and blast Improper nutrient management (Excess of nitrogen application) Increased cost of production 	85 ha	 FLD – Demonstration on Direct Seeded Rice Training IPM for the stem borer and BPH Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
	Arecanut	 No intercrop Water scarcity Nut splitting, premature dropping of nuts Yellowing of leaves Disposal of Arecanut husk on road sides 	60 ha	 OFT - Evaluation of performance of different compost cultures to decompose arecanut husk Training Production technology of Arecanut Method demonstrations Method of placing fertilizers Foliar spray of micronutrients Extension activities
	Dairy	 Scarcity of good quality of fodder Under /malnutrition Mastitis 	150 No.	 FLD – Feeding colostrums and milk to female calves during early stage Training Use of Non-protein nitrogenous (NPN) substances in reducing the feeding cost in dairy animals Importance of colostrums and milk feeding to crossbred female calves Method demonstrations Dry fodder enrichment & feeding along with grain mixture Silage making methods Azolla production
	Fisheries	No fish culture		Introduction of fish culture
	Natural resource management Borewell recharge	• Depleted ground water level		 Rain water harvest to recharge borewells (10 No.) in convergence mode – Rs. 3,00,000/-
	Farm ponds	• No protective irrigation during critical stages of crop growth		• Construction of farm pond (10 No.) in convergence mode – Rs. 2,00,000/-
	IFS	Mono cropping systems		Irrigated IFS system – Rs. 10,000/-

1	2	3	4	5
Rameshwara Honnali taluk	Maize	 Low yield Sole crop Army worm and fall army worm Improper nutrient management (No potash application) 	320 ha	 FLD - Intercropping of pulses with (Redgram BRG-5) in Maize Training Importance of seed treatment for higher yield in intercropping system Integrated pest management in Maize + Redgram Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
	Onion	 Lower yield Incidence of sucking pests Splitting of bulbs at bulbing stage 	90 ha	 FLD – Micronutrient management in Onion Training Integrated Crop Management in Onion Method demonstrations Seed treatment with biofertilizers Extension activities
	Bengalgram	 Low yield Low yielding varieties No IPM measures Poor nutrient management Weed management Broadcasting method of sowing 	70 ha	 Training Integrated Crop Management in Bengalgram IPDM practices in Bengalgram Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
	Tomato	 Blossom end rot Improper nutrient management Pod borer Blight incidence 	40 ha	 FFS- IPM in Tomato Training Production technology IPDM practices Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
	Dairying	Low milk yieldScarcity of good quality fodderDelayed puberty	200 No.	FLD– Feeding dairy animals based on Indian standards for better performanceTraining

Sheep	 Lower body weight gain Worm infestation 	150 NO.	 Use of Non-protein nitrogenous (NPN) substances in reducing the feeding cost in dairy animals Importance of colostrums and milk feeding to crossbred female calves Method demonstrations Dry fodder enrichment & feeding along with grain mixture Silage making methods Azolla production Extension activities FLD – Controlling parasitic infestations and feeding small ruminants based on Indian standards for better performance Training Effect of total deworming and balanced nutrition in small ruminants Method demonstrations Preparation of compounded feeds for sheep Extension activities
IFS	Mono cropping systems		Dryland IFS system – 10,000/-

1	2	3	4	5
Rameshwara Honnali taluk	Enterprise Onion storage structure	Lack of storage structure		 30 x 12 feet, centre roofing height 9 feet (2 No.) Convergence mode with Dept. of Horticulture Total Cost Rs. 1,75,000/- (Subsidy Rs. 87,500/-) Implemented through FPO
	Vermicompost unit	 Deteriorated soil fertility Burning of agriculture residues 		 Construction 10 No. of units Training and method demonstration Convergence mode with Dept. of Horticulture Total cost Rs. 60,000/- (Subsidy Rs. 30,000/-)
	Natural resource management – cleaning of water ways	Water stagnation in farmers fieldLow yield of field crops		• Clearing of water way leading to village tank (widening and deepening) in convergence mode - Rs. 2,00,000/-
	Village tank	Silt accumulationReduction in Storage capacityWeed menace		 De-silting and deepening of village tank (26 acre) in convergence mode - Rs. 5,00,000/- Application of tank silt to farm field
	Farm ponds	• No protective irrigation during critical stages of crop growth		Construction of farm pond (10 No.) in convergence mode - Rs. 2,00,000/-
	Capacity building	• Unorganised approach in production and marketing		FPO strengthening

1	2	3	4	5
Marikunte Jagalur taluk	Maize	 No intercrop Fall army worm Imbalanced nutrient management Moisture stress at critical stage of crop growth 	310 ha	 FLD – Intercropping of pulses with (Redgram BRG-5) in Maize Training Importance of seed treatment for higher yield in intercropping system Integrated pest management in Maize + Redgram Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities Farm pond construction with convergence mode
	Cotton	 Improper nutrient management Sucking pest and pink boll worm Square dropping and leaf reddening 	27 ha	 FLD – Integrated Crop Management in Cotton Training Advanced production technologies in Cotton Method demonstrations Installation of yellow sticky traps Preparation of spraying solutions Extension activities
	Groundnut	 Imbalanced nutrient management Collar rot Use of TMV-2 variety 	20 ha	 Training Improved production technology for higher yield Integrated Nutrient Management Integrated Disease Management Method demonstrations Seed treatment with biofertilizers Use of stripper Extension activities
	Arecanut	 Imbalanced nutrient management Inflorescence die back No intercropping 	30 ha	 Training Production technology of Arecanut Method demonstrations Method of placing fertilizers Foliar spray of micronutrients Extension activities

Chilli	 Imbalanced nutrient management No IPDM practices 	13 ha	 FLD – Micronutrient management in Chilli Training Integrated Crop Management in Chilli Method demonstrations Seed treatment with biofertilizers Installation of pheromone traps Extension activities
Fingermillet	 Imbalanced nutrient management Stem borer 	17 ha	 Training Integrated Crop Management in Fingermillet Method demonstrations Spraying of WSF Extension activities
Drumstick	Monocropping of Maize		 OFT – Assessment of crop management strategies in drumstick for higher yield FLD – Demonstration on Drumstick variety KDM-1 (Bhagya) Training Advanced production technologies in Drumstick Method demonstrations Pinching to 3 feet height Extension activities
Dairying	 Low milk yield Poor feeding due to shortage of fodder Delayed puberty 	124 No.	 Training Use of Non-protein nitrogenous (NPN) substances in reducing the feeding cost in dairy animals Importance of colostrums and milk feeding to crossbred female calves Method demonstrations Dry fodder enrichment & feeding along with grain mixture Silage making methods Azolla production

Sheep	 Lowe body weight gain Under nutrition Worm infestation 	950 No.	 FLD – Balanced feeding and Total deworming in small ruminants for better performance Training Effect of total deworming and balanced nutrition in small ruminants Method demonstrations Preparation of compounded feeds for sheep Extension activities
IFS	Mono cropping systems		Dryland IFS system – 10,000/-

1	2	3	4	5
Marikunte Jagalur taluk	Natural resource management borewell recharge	• Depleted ground water level		• Rain water harvest to recharge borewells (2 No.) in convergence mode - Rs. 60,000/-
	Natural resource management	• Soil and water erosion		• Formation of trench cum bund (20 ha) in convergence mode - Rs. 2,00,000/-
	Farm ponds	• No protective irrigation during critical stages of crop growth		• Construction of farm pond (10 No.) in convergence mode - Rs. 2,00,000/-
	Village tank	• Insufficient water		• Filling of tank with river water (Tungabhadra – Convergence)
	Capacity building	• Unorganised approach in production and marketing		• FPO strengthening

5. Technology assessment during 2019-20

Sl. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of technology	Name of critical input	Qty per trial (q)	Cost per trial (Rs.)	No . of tri als	Total cost (Rs.)	Parameters to be studied	Team members
	Black pepper	 Lack of knowledge on suitable intercrop Less return in existing intercrops Fluctuation in prices 	Assessment of different varieties of Black pepper as intercrop in Arecanut gardens	T ₁ T ₂ - Panniyur-4 T ₃ - Coorg Excel T ₄ - IISR-Thevam	No intercrop KAU CHES, Chettalli IISR Calicut	 Seedlings Seedlings	200 No 200 No 200 No	 3000/ - 3000/ - 4000/ -	03	30,000/-	 Plant height (cm) No. of leaves (No.) Incidence of pest and disease (%) 	SMS (Horticulture) SMS (Soil Science) SSH

Sl. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of technology	Name of critical input	Qty per trial (q)	Cost per trial (Rs.)	No . of tri als	Total cost (Rs.)	Parameters to be studied	Team members
5.2	Drumstick	 Improper nutrient management Flower and fruit dropping 	Assessment of crop management strategies in drumstick for higher yield	T ₁ Soil application of 100 g 15:15:15/plant along with FYM + Remaining ICM practices					05	95 4000/-	 Yield (q/ha) No. of pods/ plant (No.) Pod length 	SMS (Soil Science) SMS (Horticulture) SSH
				T ₂ - Soil test based application of 54:134:32 N:P ₂ O ₅ :K ₂ O / plant along with FYM +Remaining ICM practices	UHS, Bagalkot						(cm)	
				T ₃ - Soil test based fertilizer application of 45:15:30 g of N:P ₂ O ₅ :K ₂ O/plant along with FYM + 0.4% Micronutrient mixture + 20ppm NAA (2 spays at flower initiation and 10 days after first spray) +Remaining ICM practices	TNAU, Coimbatore	Micronutrient mixture NAA	500 ml 200 ml	400/-				

SI. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of technology	Name of critical input	Qty per trial (q)	Cost per trial (Rs.)	No . of tri als	Total cost (Rs.)	Parameters to be studied	Team members
5.3	Compost culture	 Improper disposal of arecanut husk High lignin 	Evaluation of performance of different compost	T1 - Dispose of arecanut husk in road sides					05	5000/-	• Numbers of days to compost (No.)	SMS (Agronomy) SMS (Horticulture)
		 content Lack of awareness on composting methods Non availability of 	cultures to decompose arecanut husk	T ₂ - Composting the arecanut husk in a proper way by using UAS, Dharwad compost culture @ 2kg/t	UAS, Dharwad	Compost culture	3 kg	300/-	-		• C:N Ratio	SMS (Soil Science) SSH
		suitable microbial consortium		T ₃ - Composting the arecanut husk in a proper way by using decomposer compost culture @ 100 ml/t	NCOF, Newdelhi	Waste decmoposer	200 ml	200/-				
				T ₄ - Composting the arecanut husk in a proper way by using UAHS, Shivamogga compost culture @ 2kg/t	UASH, Shivamogg a	Compost culture	3 kg	300/-				

Sl. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of technolo gy	Name of critical input	Qty per trial (q)	Cost per trial (Rs.)	No . of tri als	Total cost (Rs.)	Parameters to be studied	Team members										
5.4	Dairy	Generally dairy animals are fed with poor quality dry roughages along with a few feed ingredients. These fodders	Effect of feeding urea- treated dry fodders along with grain mixture for better	T1- Feeding dairy with low quality dry roughages and non-leguminous green fodders along with cake and bran items.					05	12,200/-	yield (A (Liters) Sc • Specific SM gravity of Ex milk SS (CLR) • Cost of milk production	SMS (Animal Science) SMS (Agri. Extension) SSH										
		when fed to high yielding dairy animals would	performance in dairy animals	T ₂ - Feeding dairy animals with urea-	KVA & FSU, Bidar	Chelated Agrimin forte	5 kg	600/-														
		not support production and health due to		treated dry roughages, green fodders	Didai	Hitek bolus (80 mg)	2 No.	120/-												(Rs./l)	(Ks./l)	(KS./1)
		deficiency of Protein, energy & minerals. Poor quality dry		and compounded animal feeds as per the NRC Specifications		Ostovet forte	51	550/-														
		roughages when enriched with urea and fed		T_{3} - Feeding dairy animals with urea-	NIANP, Bengaluru	Chelated Agrimin forte	5 kg	600/-														
		along with Grain mixture (starch) improving the		treated dry roughages, green fodders		Hitek bolus (80 mg)	2 No.	120/-														
		digestibility of dry roughages and supplied the crude protein & Energy(TDN) required by the animal.		and compounded animal feeds as per the NRC specifications. PLUS using 1-2 kg grain mixture at the time of feeding urea- treated dry roughages		Ostovet forte	51	550/-														

6. Frontline demonstrations during 2019-20

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.1.1	Cereals	Rice	 Non availability of water for timely operation Tail enders Higher cost of production (65,000 ha) Poor soil health Indiscriminate use of fertilizers (150:80:30 kg N:P₂O₅:K₂/ha) 	 Demonstration on Direct Seeded Rice Land Preparation and Sowing : ✓ Land should be leveled and brought to fine tilth ✓ Seed rate-25 kg/ha ✓ Seed treatment with Bio Fertilizers (Azosprillium, PSB and KSB) ✓ Application of ZnSO₄ @20kg/ha Integrated Weed Management: Pre-Emergent: (2-3 DAS)-Pendimethilin 30EC 1 l/ha -500 to liter of water (grasses***, broad leaf**, Sedges*) Post emergent : (15-20 DAS) Bispyribac Sodium 100 SC - (grasses***, broad leaf**, Sedges*) 250 ml + Metsulfuron 20 WP (Broad leaf) - 20 g/ha. ✓ Cycle weeder -power operated and bullock drawn , Hand weeding Plant Protection Measures: ✓ Installation of pheromone traps @ 12 no/ha (24 lures)-Army worm (Mythimna seperata) ✓ Use of tricho cards @ 20 /acre ✓ Spraying of Chemicals 	RNR-1 (Private variety)		UAS (R)

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Bio fertilizer	1 kg	100/-	10	38,500/-	• Yield (q/ha)	SMS (Agronomy)
Hiring charges of seed cum fertilizer drill		1500/-			• No. of plants/Sqm	SMS (Soil Science)
Installation of pheromone traps @ 4 No./acre (8 lures)		300/-			• Plant height (cm)	SSH
– Army worm (<i>Mythimna seperata</i>) + Tricho cards (15					• No. of productive tillers	
No)					(No.)	
ZnSO ₄	8 kg	250/-			• Test weight 1000 seeds (g)	
Pendimethilin 30 EC (Pre-emergent 2-3 DAS)	0.51	200/-				
Power weeder hiring charges		500/-				
Bispyribac Sodium 100 SC (Post Emergent) -Grasses		500/-				
and Sedges -15-20 DAS -100 ml + Metsulfuron 20						
WP (Broad leaf) 15 -20 DAS- 8 g or cyhalofop-						
butyl+penoxulam 1 liter per acre grasses						
Use of thrasher for cutting of the paddy stubbles		500/-				
	Total	3,850/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.1.2	Cereals	Maize + Redgram	• Army worm incidence and fall army worm (60-100%)	Intercropping of pulses (Redgram BRG- 5) in Maize	BRG-5	Private hybrid	UAHS (S)
			• No intercropping with pulses (90%)	 ✓ Sowing of Redgram as an intercrop in maize (8:1) 			
			• Yield loss with sole crop upto 80%	✓ Spacing of 60X30 cm for maize and 60x60 cm			
			 Affected area – 500 ha Soil health deterioration due to monocropping 	✓ Management (Spray with Chloropyripous @ 2ml/l (Stem Borer) and Mancozeb-2.5 g/l (Downey mildew) for Maize			
				✓ BRG-5 medium duration wilt tolerant variety			
				✓ Use of biofertilizers <i>Rhizobium</i> , PSB and VAM 1 kg each/ha			
				 ✓ Spray Pulse magic (UAS, Raichur) 10 g/l @ 5 kg/ha 			
				 ✓ Nipping after 70 days after sowing DAS 			
				Pod borer management			
				 ✓ Installation of pheromone traps @ 8no. / ha (16 lures)- pod borer 			
				 ✓ Installation of pheromone traps @ 12 no/ha (24 lures)-Army worm (Mythimna seperata) 			
				Fall army worm management			
				✓ Spray with profenophos @ 2ml/l- Ovicidal- 1 l/ha			
				 ✓ Preparation of Poison bait (20 kg rice bran + 2 kg Jaggery+Chloro+Cyper (250 ml)) 			

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Redgram BRG-5	3 kg	300/-	25	37,500/-	• Yield (q/ha) [Maize + Redgram]	SMS (Agronomy)
ZnSO ₄	4 kg	200/-			• No. of rows/cob (No.) [Maize]	SMS (Soil Science)
Pulse magic	2 kg	500/-			• No. of pods/plant (No.)	SSH
Pheromone traps 4 No. @ lures 6 number (Pod borer)	4 No.	200/-			[Redgram]	
Pheromone traps 3 No. @ lures 6 number (Army	3 No.	300/-			• Incidence of pod borer & wilt (%)	
worm)						
		1,500/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.5.1	Commercial crops	Cotton	 Improper spacing (2¹ row spacing) Improper nutrient management (140:100:75 kg N:P₂O₅:K₂/ha) Incidence of sucking pest (10-30% yield bales) Leaf reddening (Mg deficiency) Square drying (25% yield loss) 	 Integrated Crop Management in Cotton ✓ Maintaining proper spacing (4 x 4 feet) ✓ Soil test based fertilizer application ✓ Trap crop Bhendi/Marigold (25:1) ✓ Yellow sticky traps ✓ Spraying Acetamaprid 20 SP @ 0.2 g/l against sucking pest ✓ Spraying of Planofix @ 1ml/4.5 1 ✓ Spraying of MgSO₄ 1% @ 75 & 90 DAS ✓ Spraying of KNO₃ @ 1% at 90 & 110 DAS 		BG-II	UAHS (Shivamogga)

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Yellow sticky trap	8 No.	400/-	20	38,000/-	• Yield (q/ha)	SMS (Soil Science)
Pheromone traps	5 No.	250/-			• Percent square dropping (%)	SMS (Agronomy)
MgSO ₄	2 kg	400/-			• Leaf reddening (%)	SSH
KNO ₃	2 kg	400/-			• No. of bolls/plant (No.)	
Planofix	100 ml	200/-				
Safety kit	1	250/-				
	Total	1,900/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.6.1	Horticultural crops	Arecanut	 No drainage (28%) Incidence of Hidimundige (45%) Lower fertility (28%) Indiscriminate use of fertilizers (150:100:100/Plant) 	 Integrated Pest and Disease Management in Arecanut ✓ For every two rows one row of 2.5-3 feet drainage ✓ Loosening of soil around plant ✓ Avoiding flood irrigation ✓ Application of RDF based on soil test ✓ Trichoderma enriched organic manure ✓ Intercrop with velvet beans 	Channagiri local		AICRP Arecanut (Shivamogga)

Name of critical input	Qty per	Cost	No. of	Total cost	Parameters to be studied	Team members
	demo	per	demos	for the demo		
		demo				
		(Rs.)		(Rs.)		
Trichoderma harzianum	21	600/-	10	15,000/-	• Yield (q/ha)	SMS (Horticulture)
					• Percent incidence of Hidimundige	SMS (Soil Science)
Mucuna	5 kg	900/-			e	· · · · · ·
	0				• Percent of nut splitting and dropping	SSH
	Total	1,500/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.6.2	Horticultural crops	Betelvine	 Incidence of downey mildew (8%) Sucking insect damage (15%) Mealy bug for standard (32%) Imbalance nutrition (17:17:17 @ 100 g/vine) 	 Wilt management in Betelvine ✓ Recommended RDF (0:50:50 g NPK/Vine) ✓ Controlled irrigation ✓ Drenching Copper oxy chloride @ 3 g/l @ lowering of vine ✓ Drenching AMC @ 5 ml/l- Thrice ✓ Spraying Verticillium lecanae @ 5 ml /l 	Nagaveni		IIHR, Bengaluru

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Arka Microbial Consortium	21	500/-	10	9,500/-	 Yield (q/ha) Percent of Wilt incidence (%) 	SMS (Horticulture) SMS (Soil Science)
Verticillium lecanae	11	450/-			• Incidence of sucking pest (%)	SSH
	Total	950/-				

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Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.6.3	Horticultural crops	Onion	 Use of Nyamathi local variety Incidence of purple blotch (20%) Incidence of thrips (15%) 	 Micronutrient management in Onion ✓ Use of Bhima Super variety (10 kg/ha) ✓ Application of gypsum (as source of sulphur) @ 2.5 q/ha ✓ Seed treatment with <i>Trichoderma harzianum</i> @ 4 g/kg ✓ Use of post emergent herbicide (Oxyfluorfen 23.5% EC @ 300 g/acre) ✓ Foliar nutrition with Arka Vegetable Special & water soluble fertilizers (30 and 60 DAT) @ 5 g/l ✓ 2 rows of maize as barrier crop to manage adult thrips ✓ Spray with Fipronil @ 1 ml/l to control sucking pest ✓ Spray with Hexaconazole @ 1 ml/l to purple blotch 	Bhima super		AICRP on Onion and Garlic, RC, Hiriyur

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Trichoderma harzianum	11	300/-	20	14,000/-	 Yield (q/ha) Germination of seed (%) 	SMS (Horticulture) SMS (Soil Science)
Arka vegetable special	2 kg	400/-			• Weight of bulb (g)	SSH
	Total	700/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.6.4	Horticultural crops	Chilli	 Improper nutrient management (70:100:40 kg N:P₂O₅:K₂/ha) Calcium, Boron and Zinc deficiency (20% yield loss) Incidence of sucking pest (20-60% yield loss) 	 Micronutrient management in Chilli ✓ Weather based agronomic practices ✓ Soil test based nutrient application ✓ Application of Arka Microbial Consortium (10 ml for seed treatment, 10ml/l – drenching 10 DAT, 3 ml- Main field along with vermicompost) ✓ Spray of vegetable special @ 5g/l ✓ Spray of calcium + boron (Calbor) @ 5ml/l ✓ Use of yellow and blue sticky traps @ 25/ha ✓ Need based plant protection measures 		Private	IIHR, Bengaluru

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Arka Microbial Consortium	31	750/-	10	31,000/-	• Yield (q/ha)	SMS (Soil Science)
Vegetable special	4 kg	800/-			• No. of fruits/plant (No.)	SMS (Horticulture)
Calcium + Boron	11	400/-			• Plant height (cm)	SSH
Verticillium lecanii	11	400/-			• Incidence of leaf curl (%)	
Yellow sticky and blue sticky traps	10 No.	500/-				
Safety kit	1 No.	250/-				
	Total	3,100/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.6.5	Horticultural crops	Drumstick	 Reduced ground water level (800 feet) Mono cropping of maize 	 Demonstration on Drumstick variety KDM-1 (Bhagya) ✓ Demonstration of KDM-1 (Bhagya) variety ✓ Soil test based fertilizer application ✓ Intercropping with pulses/groundnut ✓ Need based plant protection measures ✓ Market intervention 	KDM-1 (Bhagya)		UAHS, Shivamogga

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Seedlings of KDM-1 (Bhagya)	600 No.	6000/-	3	18,000/-	Yield (q/ha)Number of pods/plant	SMS (Soil Science) SMS (Horticulture) SSH
	Total	6,000/-				

Sl. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Name of variety	Name of hybrid	Source of technology
6.6.6	Horticultural crops	Banana	Higher incidence of sigatoka leaf spot	 Management of Sigatoka leaf spot disease in Banana ✓ Removal of affected leaves and burning ✓ Planting of seedlings in recommended spacing (6 x 6). ✓ Adaptation of drainage system ✓ Spraying of fungicides with p ✓ Repeat the spray depending upon incidence ✓ Guile discrete the state to be backet. 	v		UAHS, Shivamogga
				✓ Soil application of trichoderma			

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Propiconazole	500 1	700/-	5	12500/-	Yield (t/ha)% incidence of leaf spot	SMS (Plant Protection) SMS (Horticulture) SMS (Soil Science)
Petroleum based mineral oil	21	1800/-				SSH
	Total	2,500/-				

Sl.	Category	Crop/	Prioritized problem	Technology to be demonstrated	Name of	Name of	Source of
No.		enterprise			variety	hybrid	technology
6.7.1	Livestock	Dairy	Weakness	Feeding dairy animals based on Indian	-	HFx	KVAFSU,
		animals	• Infertility problem	Standards for better performance			Bidar
			(50-60% of the				
			breedable population)	 Timely Deworming and vaccination 			
			• Low milk yield (4-5	\checkmark Use of compounded feed, minerals and			
			/milk/day/animal)	vitamins required for body			
				maintenance & production as per			
				Feeding standards			
				✓ Dry fodder enrichment			
				✓ Silage making,			
				✓ Azolla cultivation &Use			

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Hitek bolus (3 g)	1No.	60/-	20	57,800/-	• Milk yield (l/lactation)	SMS (Animal Science)
Chelated Agrimin forte	5 kg	600/-			• Milk quality (Specific gravity)	SSH
Enzymex powder @ 5 g/kg dry fodder	1 kg	180/-			• Cost of feeding (Rs/l)	SMS (Agri. Extension)
Brolaytine tonic @ 2 ml/kg fodder	500 ml	450/-			• No. of AI/AIs for conceiving	
Plastic Drums (250 l)	2 No.	1600/-			C C	
	Total	2,890/-				

Sl.	Category	Crop/	Prioritized problem	Technology to be demonstrated	Name of	Name of	Source of
No.		enterprise			variety	hybrid	technology
6.7.2	Livestock	Small	• Lower body weight	Controlling parasitic infestations and	-	Bellaryx	KVAFSU,
		ruminants	gain (18-20 kg at	feeding small ruminants based on Indian			Bidar
			maturity)	standards for better performance			
			• Sudden mortality				
			• Delayed puberty	✓ Balanced feeding based on standards			
			(Maturity @ 15-18	✓ Timely Deworming & Vaccination			
			months)	\checkmark Use of special mineral mixtures & liver			
				tonic			

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Fenbendazole (150 mg)	20 No.	100/-	10	13,000/-	Body weight gain (kg) Martalita rate (9())	SMS (Animal Science) SSH
Mineral mixture for sheep & goat (5 g/day/animal)	5 kg	600/-			 Mortality rate (%) Cost of meat production (Rs./kg) 	SMS (Agri. Extension)
Liver tonic (K-Live – 5 ml/day/animal)	51	600/-			(KS./Kg)	
	Total	1,300/-				

SI.	Category	Crop/	Prioritized problem	Technology to be demonstrated	Name of	Name of	Source of
No.		enterprise			variety	hybrid	technology
6.7.3	Livestock	Cross bred	• Weakness	Feeding colostrums and milk to female	-		KVAFSU,
		female	• Pot belly (120-130 kg	calves during early stage			Bidar
		calves	@ 1 year)				
			 Lower body weight 	✓ Colostrums feeding methods			
			gain & delayed	✓ Deworming and vaccination			
			puberty (Takes 3	✓ Use of Milk Replacer			
			years to come to	\checkmark Calf starter essential minerals and			
			puberty)	vitamins required for growth.			
				vitaninis required for growth.			

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Fentos (600 mg)	2 No.	50/-	10	21,500/-	• Body weight gain (kg)	SMS (Animal Science)
Agrimin forte (@ 25-30 g/day)	5 kg	600/-			• Cost of feeding (Rs/day)	SSH
Milk replacer	2 kg	300/-	-		• Age at puberty (months)	SMS (Agri. Extension)
Calf starter	40 kg	1200/-				
(Compounded feed @ 300-500 g/day)						
	Total	2,150/-				

Sl.	Category	Crop/	Prioritized problem	Technology to be demonstrated	Name of	Name of	Source of
No.		enterprise			variety	hybrid	technology
6.8.1	Fisheries	Fish	• Low yield (8-10 q/ha)	Integrated management of fish culture in	Catla,		KVAFSU,
				ponds	Rohu,		Bidar
					Common		
				\checkmark Pond preparation and management	carp, Silver		
				✓ Seed selection and stocking	carp,		
				✓ Feed and feeding management	Pangassius		
				\checkmark Health and water quality monitoring			
				and harvesting			

Name of critical input	Qty per demo	Cost per demo (Rs.)	No. of demos	Total cost for the demo (Rs.)	Parameters to be studied	Team members
Fish seeds	5000 No.	5000/-	5	27,500/-	Yield (t/ha)Average body weight (g)	SSH SMS (Agri. Extension)
Area Specific Mineral Mixture	5 kg	500/-				
	Total	5,500/-				

8. Training for farmers/ farm women during 2019-20

Sl.No.	Thematic area and the crop/ enterprise	Crop / Enterprise	Related field intervention (OFT/FLD)	Training title	No. of courses	Expected No. of participants	Names of the team members involved
7.1	Crop production	Groundnut	OFT	Improved production technology for higher yield	01	30	SMS (Ag & SS)
		Groundnut	OFT	Integrated Nutrient management	01	40	SMS (Ag & SS)
		Rice	FLD	Land preparation and selection of varieties, Seed treatment for DSR	01	25	SMS (Ag & SS)
		Maize + Redgram	FLD	Importance of seed treatment for higher yield in intercropping system	01	25	SMS (Ag & SS)
		Cotton	FLD	Advanced production technologies of cotton	1	25	SMS (SS, Ag & AE)
7.2	Horticulture production	Arecanut	FLD	Production technology of Arecanut	02	50	SMS (Hort. & SS)
		Banana	FLD	Integrated Pest & Disease Management Banana	02	50	SMS (PP & Hort.)
		Betel vine	FLD	Recent trends in Production technology of Betelvine	01	30	SMS (Hort. & SS)
		Onion	FLD	Integrated crop Management in Onion	01	30	SMS (Hort. & SS)
		Black Pepper	OFT	Production technology of Pepper	01	30	SMS (Hort. & SS)
		Drumstick	OFT & FLD	Advanced production technologies of Drumstick	1	25	SMS (SS, Hort. & AE)
		Chilli	FLD	Integrated crop management in Chilli	1	25	SMS (SS, Hort. & AE)
7.3	Livestock production	Dairy	FLD	Use of Non-protein nitrogenous (NPN) substances in reducing the feeding cost in dairy animals	2	60	SMS (ASc., AE & SSH)
		Dairy	FLD	Importance of colostrums and milk feeding to crossbred female calves	2	60	SMS (ASc., AE & SSH)
		Sheep & Goat	FLD	Effect of total deworming and balanced nutrition in small ruminants	2	50	SMS (ASc., AE & SSH)
		Dairy	FLD	Balancing the nutrition in cattle based on feeding standards	2	60	SMS (ASc., AE & SSH)

Sl.No.	Thematic area and the crop/ enterprise	Crop / Enterprise	Related field intervention (OFT/FLD)	Training title	No. of courses	Expected No. of participants	Names of the team members involved
7.4	Home Science						
7.5	Plant protection	Maize + Redgram	FLD	Integrated pest management in Maize +Redgram	01	25	SMS (Ag & SS)
		Rice	FLD	IPM for the Stem borer and BPH	01	25	SMS (Ag & SS)
7.6	Production of inputs at site						
7.7	Soil health and fertility			Soil health management based on soil analysis report	05	125	SMS (SS & AE)
		Arecanut	OFT	Rapid composting of arecanut husk by using compost cultures	01	25	SMS (SS, Hort. & AE)
7.8	PHT and value addition	Groundnut	OFT	Grading and oil extraction	01	35	SMS (Ag & SS)
7.9	Capacity building/ group dynamics						
7.10	Farm mechanization	Groundnut	0FT	Mechanized harvesting using stripper	01	30	SMS (Ag & SS)
		Rice	FLD	Weed management through Mechanized cycle weeder	01	25	SMS (Ag & SS)
		Maize + Redgram	FLD	Integrated pest management in Maize +Redgram	01	25	SMS (Ag & SS)
7.11	Fisheries production technologies	Fish	FLD	Principles of fish farming	01	10	Senior Scientist & Head
7.12	Mushroom production	Mushroom		Production and marketing of Mushroom	01	50	SMS (AE)
7.13	Agro forestry	Sandalwood & Other forestry technologies		Production technology of sandalwood	01	50	SMS (AE)
7.14	Bee keeping	Honey bee		Production technology of Honey	01	25	SMS (AE)
7.15	Sericulture						
				Total	36	1015	

8. Training for rural youth during 2019-20

Sl.No.	Thematic area and the crop/ enterprise	Crop / Enterprise	Related field intervention (EDP/Skill development etc)	Training title	No. of courses	Expected No. of participants	Names of the team members involved
8.1	Crop production	Vermicompost	EDP	ImprovedProductiontechnologyofvermicompost	01	25	SMS (Ag, SS & ASc.)
8.2	Horticulture production	Coconut	Skill Development	Friends of Coconut Tree	01	20	SMS (Hort. & SS)
8.3	Livestock production	Sheep & Goat	EDP	Profitable sheep farming (Stall feeding)	01	20	SMS (ASc., AE & SSH)
		Dairy	Skilled	Dairy entrepreneur	01	20	SMS (ASc., AE & SSH)
8.4	Home Science						
8.5	Plant protection						
8.6	Production of inputs at site						
8.7	Soil health and fertility			Methods of soil testing and maintenance of soil and water testing laboratory	01	20	SMS (SS, Ag & AE)
8.8	PHT and value addition						
8.9	Capacity building/ group dynamics						
8.10	Farm mechanization						
8.11	Fisheries production technologies	Fish	Skilled	Fish seeding in farm ponds	01	10	Senior Scientist & Head
8.12	Mushroom production						
8.13	Agro forestry						
8.14	Bee keeping						
8.15	Sericulture						
				Total	06	115	

Sl.No.	Thematic area and the crop/ enterprise	Training title	No. of courses	Expected No. of participants	Names of the team members involved	
9.1	Crop production	Improved production technology in Direct Seeded Rice	01	20	SMS (Ag & SS)	
9.2	Home Science					
9.3	Capacity building and group dynamics					
9.4	Horticulture	New technologies in Horticulture crop production	01	50	SMS (Hort. & SS)	
9.5	Livestock production and management	New feed resources for animal feeding	01	25	SMS (ASc., AE) & SSH)	
9.6	Plant protection					
9.7	Farm mechanization	Complete mechanization in transplanted paddy for higher yield	01	20	SMS (Ag & SS)	
9.8	PHT and value addition					
9.9	Production of inputs at site					
9.10	Sericulture	Nutrient management in mulberry cultivation	1	25	SMS (SS & AE)	
9.11	Fisheries	Integrated Fish farming	01	40	Senior Scientist & Head	
		Total	06	180		

9. Training for extension personnel during 2019-20

10. Vocational trainings during 2019-20

Sl.No.	Thematic area and the crop/ enterprise	Training title	No. of programmes	Duration (days)	Expected No. of participants	Sponsoring agency, if any	Names of the team members involved
10.1	Crop production						
10.2	Home Science						
10.3	Capacity building and group Dynamics						
10.4	Horticulture	Horticulture nursery Management	01	05	20	Department of Horticulture	SMS (Hort. & SS)
10.5	Livestock production and management	Rearing local poultry birds in backyard	01	05	20		SMS (ASc., AE & SSH)
10.6	Plant protection						
10.7	Farm mechanization						
10.8	PHT and value addition						
10.9	Production of inputs at site						
10.10	Sericulture						
10.11	Fisheries						
		Total	02		40		

11. Sponsored trainings during 2019-20

Sl.No.	Thematic area and the crop/ enterprise	Training title	No. of programmes	Duration (days)	Expected number of participants	Sponsoring agency	Names of the team members involved
11.1	Crop production	LRI- based soil and water conservation technologies	20	01	1000	ATARI and SUJALA III, Bangalore	SMS (Ag & SS)
11.2	Home Science						
11.3	Capacity building and group Dynamics						
11.4	Horticulture	Terrace and Kitchen gardening	02	01	300	Department of Horticulture	SMS (Hort.)
11.5	Livestock production and management	Scientific dairy farming	02	06	50	Zilla Panchayath, Davanagere	SMS (ASc., AE) & SSH)
11.6	Plant protection						
11.7	Farm mechanization						
11.8	PHT and value addition						
11.9	Production of inputs at site						
11.10	Sericulture						
11.11	Fisheries	Advances in fish culture	01	01	20	Department of Fisheries	Senior Scientist & Head
		Total	25		1370		

12. Extension activities during 2019-20

Sl.	Extension activity	No. of activities	Targeted number of participants	Names of the team
No.				members involved
12.1	Advisory services	2000	2200	
12.2	Diagnostic visits	10	120	
12.3	Field days	20	2500	
12.4	Group discussions	05	250	
12.5	Kisan gosthies	05	500	
12.6	Film shows	10	500	
12.7	Self -Help Groups (SHGs) meetings			
12.8	Kisan Melas	03		
12.9	Exhibitions	02		
12.10	Scientists' visit to farmers fields	200	1500	
12.11	Plant/soil health/animal health camps	5 + 5	600 samples + 500 animals	
12.12	Farm science club meetings	01		
12.13	Ex-trainees sammelans (Meetings)	01	40	
12.14	Farmers' seminars/workshops	06	300	
12.15	Method demonstrations	20	300	
12.16	Celebration of important days	04	300	
12.17	Special day celebrations	10	2000	All Scientists
12.18	Exposure visits	04	200	involved
12.19	Technology week celebration	01	1000	
12.20	Farmers Field School (FFS)	01	25	
12.21	Farm innovators meet			
12.22	Awareness programmes	04	250	
12.23	Pre-kharif campaign	01	1000	
12.24	Pre-rabi/summer campaign	01	1000	
12.25	Bimonthly Meetings	06	450	
12.26	Tri-monthly meetings	04	300	
12.27	Guest lecture	50	2000	
12.28	Popular article	10		
12.29	News paper coverage	60		
12.30	Swachha Bharath Campaigns	10		
12.31	Kisan Mobile Advisory Services	50	11505	
12.32	Radio Talk	10		
12.33	TV Talk	08		
12.34	Newspaper Coverage	60		

12.35	Best cyclist	05	
12.36	Best Farm Family	05	
12.37	Best Village Road	05	
12.38	Best Animal Care Taker	05	
12.39	Best Nutritional Kitchen Garden	05	
12.40	Best Entrepreneur	05	
12.41	Best Women SHG	05	
12.42	Best Men SHG	05	

13. Activities proposed as knowledge and resource centre during 2019-20

13.1 Technological knowledge

Sl. No.	Category	Details of technologies	Area (ha)	Number	Names of the team members involved
13.1.1	Technology park/ crop cafeteria	High density planting in Guava, Jack, Mango and Arecanut	02		Farm Manager & SMS (Horticulture)
13.1.2	Demonstration units	Gold fish production	1 unit	10,000	Senior Scientist and Head
13.1.3	Lab analytical services	Soil test campaigns	5 villages	1000	SMS (Soil Science), Programme Assistant (Lab. Technician)
13.1.4	Technology week	Frontline demonstrations Seminars Exhibition		1000	All team members
13.1.5	PUC students orientation			300	SMS (Horticulture)
12.1.6	FPO Capacity Building			05	SMS (Agri. Extension)
12.1.7	Science project for school children			05	All Scientific staff
12.1.8	Soil & water analysis training to degree students			10	SMS (Soil Science) & Programme Assistant (Lab. Technician)
12.1.9	DAESI diploma course			40	All Scientific staff
12.1.10	Kasa Rasa Training			100 People	SMS (Animal Science)
12.1.11	Kitchen garden training			100 People	SMS (Horticulture)

13.2 Technological products

Sl. No.	Category	Name of the production partner agency, if any	Name of the product	Quantity planned to be produced during 2019-20 (q)	Number planned to be produced during 2019-20	Names of the team members involved
13.2.1	Seeds					
			Sunhemp	06		Farm Manager Programme Assistant (Lab. Technician)
			Dhaiancha	08		Farm Manager Programme Assistant (Lab. Technician)
			Velvetbeans	03		Farm Manager SMS (Horticulture)
13.2.2	Planting material					
			Arecanut		20000	SMS (Horticulture)
			Coconut		5000	SMS (Horticulture)
			Drumstick		15000	SMS (Horticulture)
13.2.3	Bio-products					
			Banana Special	30		SMS (Horticulture)
			Vermicompost	150		SMS (Animal Science)
			Earthworms	0.4		SMS (Animal Science)
			Compost culture	06		SMS (Soil Science)
			Trichoderma Harzianum	2001		SMS (Agronomy) & SMS (Soil Science)
			PSB	2001		SMS (Agronomy) & SMS (Soil Science)
			Metarizium	1001		SMS (Agronomy) & SMS (Soil Science)
13.2.4	Livestock strains					
			Male calves		5-6 No.	SMS (Animal Science)
13.2.5	Fish fingerlings					
			Fish fingerlings		15000 No.	Senior Scientist and Head
13.2.6	Any other					

13.3 Technological information

Sl. No.	Category	Technological capsules/lectures/number	Names of the team members involved
13.3.1	Technology backstopping to line departments	<u> </u>	
	a. Agriculture	01 (Training to agriculture officers and ATMA personnel)	SMS (Agronomy)
	b.Horticulture	01 (Training to AHOs & Horticulture Assistants)	SMS (Horticulture)
	c. Animal Husbandry	01 (New feed resources for animal feeding)	SMS (Animal Science)
	d.Fisheries	01 (Advances in freshwater fish growing)	Senior Scientist and Head
	e. Agricultural Engineering		
	f. Sericulture		
	g. Others, pl. specify		
13.3.2	Literature/publication	08	All scientific staff
13.3.3	Electronic media	02	All staff
13.3.4	Kisan mobile advisory services	70	All scientific staff
13.3.5	Information on centre/state sector schemes and service providers in the district (Data may be collected from different agencies).	01	SMS (Agri. Extension)
12.3.6	Whatsapp groups		
	 ICAR-Taralabalu KVK 		
	 Horticulture Solution Davanagere 	04	All scientific staff
	Horti Solutions		
	Davanagere FPOs		

14. Additional activities planned during 2019-20

Sl. No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	National Innovations on Climate Resilient Agriculture (NICRA)	Technology Demonstration Component (TDC)	Climate Resilient Technology Demonstration	15,00,000-00	SMS (Agronomy) SMS (Animal Science) SSH
2	Bio-Energy Information and Demonstration Centre	Training and awareness programmes on biofuel production. Bio Seed procurement and production	Production of biodiesel – 500 l	6,00,000-00	Programme Assistant (Lab. Technician)
3	Technical Handholding of FPOs	Exposure visit training and Demonstrations	Demonstrations – 09 Training – 09 Exposure visit - 03	9,29,250	All Scientific staff

15. Revolving fund

15.1 Financial status of revolving fund

Opening balance as on 01.04.2018 (Rs. in Lakh)	Expenditure incurred during 2018-19 (Rs. in Lakh)	Receipts during 2018-19 (Rs. in Lakh)	Closing balance as on 31.03.2019 (Rs. in Lakh)	Expected closing balance by 31.03.2019 (Including value of material in stock/ likely to be produced)
2.66	54.64	67.72	15.74	5.00

15.2 Plan of activities under revolving fund

Sl. No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
1	Sunhemp	600 kg	18,000/-	Farm Manager
2	Dhaiancha	800 kg	18,000/-	Programme Assistant (Lab. Technician)
3	Velvetbeans	300 kg	15,000/-	Farm Manager & SMS (Horticulture)
4	Arecanut Seedlings	20000 No.	5,00,000/-	
5	Coconut Seedlings	5000 No.	3,00,000/-	
6	Drumstick Seedlings	15000 No.	2,00,000/-	SMS (Horticulture)
7	Banana Special	30 q	5,00,000/-	
8	Vermicompost	150 q	1,50,000/-	
9	Earthworms	0.4 q	12,000/-	SMS (Animal Science)
10	Milk	85001	2,89,000/-	
11	Compost culture	06 q	24,000/-	SMS (Soil Science)
12	Trichoderma Harzianum	2001	60,000/-	
13	PSB	2001	70,000/-	SMS (Agronomy) & SMS (Soil Science)
14	Metarizium	1001	40,000/-	
15	Fish fingerlings	5000 No.	20,000/-	Senior Scientist and Head
16	Farmers hostel	120 days	1,00,000/-	SMS (Agri. Extension)
17	Arecanut	16 q	2,00,000/-	
18	Mango fruits	5 t	1,00,000/-	
19	Sapota fruits	1.5 t	30,000/-	
20	Coconut nuts	500 No.	5,000/-	
21	Jamoon	100 kg	8,000/-	SMS (Horticulture) & Farm Manager
22	Tendor Coconut	500 No.	10,000/-	
23	Drumstick pods	550 kg	11,000/-	
24	Tamarind	375 kg	15,000/-	
25	Guava fruits	200 kg	10,000/-	

16. Activities of soil, water and plant testing laboratory during 2019-20

Sl.No.	Type of samples	No. of samples to be analyzed	Names of the team members involved
16.1	Soil test using analytical lab	2000	SMS (Soil Soignon) &
16.2	Soil test using mobile analysis kit		SMS (Soil Science) &
16.3	Water	1000	Programme Assistant (Lab. Technician)

16.4	Plant	
16.5	Others, pl. specify	

17. E-linkage during 2019-20

Sl. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
17.1	Title of the technology module to be prepared		
17.2	Creation and maintenance of relevant database system for KVK	Farmer advisory service	
17.3	Other extension activities	Month wise database maintained	

18. Activities planned under rainwater harvesting scheme (only to those KVKs which are already having scheme under rain water harvesting) - Nil

19. Farmers Field School (FFS) planned

Thematic area	Title of the FFS	Budget proposed in Rs.	Staff
Integrated Pest Management	Integrated Pest Management in hybrid Tomato	30,000/-	SMS (Agronomy, Horticulture, Soil
			Science & Agricultural Extension)

Thematic area	Budget proposed in Rs.	Budget (Rs.)
IPM in Tomato	A. Critical inputs	
	 Soil test and water test 	150-00
	 Application of Arka Microbial Consortium (20 g for seed treatment, 20g/l – 	1,750-00
	drenching 10 DAT, 7kg- Main field along with vermicompost)	
	• Spray of vegetable special @ 5g/l (4kg)	1,000-00
	• Spray of calcium nitrate @5g/l (2kg)	400-00
	IPM measures :	
	• Use of yellow and blue sticky traps @ 25/ha	1,000-00
	• Use of Marigold as a trap crop (16:1)	500-00
	• Use of pheromone traps @ 10/ha	400-00
	 Plant protection chemicals need based 	2,500-00
	B. Meals and Refreshment	5,000-00
	C. FFS training kit	8,300-00
	D. Field Day and report preparation	4,000-00
	E. Folder	5,000-00
		30,000-00

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- 1. Selection of the collaborator and participants, site selection and importance of FFS and Ballot test
- 2. Land preparation and rain water harvesting technologies
- 3. Seed treatment and transplanting, Spacing and traps crops
- 4. Integrated Nutrient management and Weed management in Tomato
- 5. Integrated Pest and Disease Management
- 6. Grading and Marketing of products
- 7. Preparation of bi products from the tomato

20. Entrepreneurship Development Programme

Honey production as subsidiary income for farm families

Honey production as subsidiary income generation activity helps in realizing additional income to rural family. In this regard 2 entrepreneurs in honey production and promoted to market honey bee colonies and honey. In addition the entrepreneurs will be provided with brood chamber, honey extractor and packing materials.

Budget requirement

Particulars	Quantity	Cost (Rs.)	Total cost (Rs.)	No. of entrepreneurs	Total Budget (Rs.)
Brood chamber	4	4,500/-	18,000/-	2	50,000/-
Honey extractor	1	5,000/-	5,000/-		
Packing		2,000/-	2,000/-		
	Total	10,000/-			

21. Details of budget utilization (2018-19) up to 31st March 2019

Sl.No.	Particulars	Sanctioned (RE 2018-19)	Released	Expenditure
21.1	(A). REVENUE (Recurring Contingencies)			
21.1.1	Pay & Allowances	1,28,00,000	1,27,88,922	1,25,78,643
21.1.2	Traveling allowances	75,000	49,500	39,152
21.1.3	Contingencies	10,75,000	10,47,926	10,47,398
21.1.3 <i>.a</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	2,31,000	2,31,000	2,30,974
21.1.3. <i>b</i>	POL, repair of vehicles, tractor and equipments	1,80,000	1,80,000	1,79,999
21.1.3. <i>c</i>	Food/refreshment for farmers/extension personnel @ Rs.150/person/day	1,00,000	1,00,000	1,00,000
21.1.3. <i>d</i>	Training material (need based materials and equipments for conducting the training)	25,000	25,000	25,000
21.1.3.e	Frontline demonstrations	3,20,000	3,10,500	3,10,353
21.1.3.f	On farm testing (OFTs)/Technology Assessment	40,000	30,000	29,731
21.1.3.g	Integrated Farming System (IFS) (Min. 5 Units)			
21.1.3.h	Training of extension functionaries	14,000	14,000	14,000
21.1.3. <i>i</i>	Extension activities/services	50,000	50,000	50,000
21.1.3.j	Farmers' Field School	30,000	28,000	28,000
21.1.3. <i>k</i>	EDP (2 Nos.) / Innovative activities			
21.1.3 <i>.l</i>	Soil & water testing & issue of soil health cards	30,000	24,426	24,415
21.1.3 <i>.m</i>	Maintenance of building	50,000	50,000	49,926
21.1.3 <i>.n</i>	Farmers Conclave, KVK Conference			
21.1.3.0	Video production			
21.1.3.p	Library (Purchase of Journals, Periodicals, News Papers & Magazines)	5,000	5,000	5,000
	Total Recurring	1,39,50,000	1,38,86,348	1,36,65,193
21.2	(B). CAPITAL (Non-Recurring Contingencies)			
21.2.1	Equipments& Furniture			
21.2.2	Works			
21.2.3	Vehicle			
21.2.3 a	Four wheeler (replacement)			
21.2.4	Library			
	TotalNon Recurring	0	0	0
21.3	(C). REVOLVING FUND	0	0	0
	GRAND TOTAL (A+B+C)	1,39,50,000	1,38,86,348	1,36,65,193

22. Details of Budget Estimate based on proposed action plan (2019-20)

Sl.No.	Particulars	BE 2019-20 proposed (Rs.)
22.1	(A). REVENUE (Recurring Contingencies)	
21.1.1	Pay & Allowances	1,39,00,000
22.1.2	Traveling allowances	2,00,000
22.1.3	Contingencies	
22.1.3.a		3,00,000
22.1.3.b	POL, repair of vehicles, tractor and equipments	3,00,000
22.1.3.c	Food/refreshment for farmers / extension personnel @ Rs.150/person/day	2,00,000
22.1.3.d	Training material (need based materials and equipments for conducting the training)	1,00,000
22.1.3.e	Frontline demonstrations	3,33,800
22.1.3.f	On farm testing (OFTs)/Technology Assessment	51,200
	Integrated Farming System (IFS) (Min. 5 Units)	
	Training of extension functionaries	50,000
	Extension activities/services	1,00,000
22.1.3.j	Farmers' Field School	30,000
	EDP (5 Nos.) / innovative activities	50,000
	Soil & water testing & issue of soil health cards	1,00,000
22.1.3.m	Maintenance of building	3,00,000
22.1.3.n		10,000
22.1.3.o	Others, pl. specify	
	Total Recurring (A)	1,60,25,000
22.2	(B). CAPITAL (Non-Recurring Contingencies)	
22.2.1	Equipments& Furniture	1,04,00,000
22.2.2	Works	4,00,00,000
22.2.3	Vehicle	
22.2.3.a	Four wheeler (replacement)	
22.2.4	Library	1,00,000
	Total Non Recurring (B)	5,05,00,000
	Grand Total (A + B)	6,65,25,000

Interventions	Number of activities	Number of farmers	Amount (Rs.)
OFT	04	18 trials	51,200/-
Frontline demonstrations	12	158	3,33,800/-
Trainings	12	150	5,55,600/-
Farmers/Farm women	36	1015	
Rural Youth	06	115	
Extension personnel	06	180	
Vocational	02	40	
Sponsored	25	1370	
FFS	01	25	30,000/-
EDP	01	02	50,000/-
NRM			
Bore well recharge	12	12	3,60,000/-
Farm ponds	30	30	6,00,000/-
Trench cum bunds	20 ha		2,00,000/-
Onion storage structure	02		1,75,000/-
Vermicompost unit	10	10	6,00,000/-
Canal cleaning	01		2,00,000/-
De-silting	01		5,00,000/-
			26,63,985/-

Abstract of interventions for 2019-20