UNIVERSITY OF AGRICULTURAL SCIENCES, BENGALURU

ICAR- KRISHI VIGYAN KENDRA, TUMAKURU

ANNUAL PROGRESS REPORT OF KVK TUMAKURU - I FOR 2016-17

ICAR - KRISHI VIGYAN KENDRA, TUMAKURU
Konehalli-572 202, Kasaba Hobli, Tiptur Taluk
Tumakuru District
Phone: 08134-294771
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ANNUAL REPORT 2016-17

(FOR THE PERIOD APRIL 2016 TO MARCH 2017)

KRISHI VIGYAN KENDRA (TUMAKURU-1)

PART I - GENERALINFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
KVK, Konehalli,Tiptur ,Tumakuru	08134-294771	--	kvktumkur@gmail.com	www.kvktumkur.org

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail	Web Address
	Office	Fax		
University of Agricultural Sciences,GKVK Bangalore	080-23332442 09449866900	080-23332442	vc@uasbangalore.edu.in	www.uasbangalore.edu.in

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. T.S. Sukanya	--	9449866936	kvktumkur@gmail.com

1.4. Year of sanction: 2004

1.5. Staff Position (as on 31st March 2017)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category
1	Programme Coordinator	Dr. T.S. Sukanya	Programme Coordinator	F	Agronomy	Ph.D (Agron)	37400-67000	46400	30-Dec-2011	Permanent	GM
2	SMS	Mr. Nagappa Desai	SMS	M	Horticulture	M.Sc(Agri.)in Hort.	15600-39100	25050	17-Jul-09	Permanent	GM
3	SMS	Dr. K.R. Shreenivasa	SMS	M	Plant Protection	Ph.D (Plant pathology)	15600-39100	25050	10-Oct-13	Permanent	GM
4	SMS	Mr. M.H.Shankara	SMS	M	Ag Extn.	M.Sc (Ag. Extn.)	15600-39100	23610	26-Oct-11	Permanent	GM
5	SMS	Dr. B. Mamatha	SMS	F	Soil Science& Agril. Chemistry (SS&AC)	Ph.D .(SS&AC)	15600-39100	22920	17-Nov-12	Permanent	GM
6	SMS	Ms. Roopa B Patil	SMS	F	Home Science	MHSc (F &N)	15600-39100	22250	11-Oct-13	Permanent	GM
7	SMS	Dr. H.B. Shivappa Nayaka	SMS	M	Animal Science	M.V.Sc (Poultry Science)	15600-39100	22250	24- Oct-13	Permanent	ST
8	Programme Assistant (Trg. Asst.)/T-4	Ms. Arjuman Banu	Trg. Asst. / T-4	F	-	MBA (ABM)	9300-34800	13910	10-Dec-13	Permanent	GM
9	Programme Assistant (Computer)/ T-4	Mr. H. Pradeep Kumar	Prog. Asst (Comp.)/ T-4	M	-	BE (CSE)	9300-34800	15210	22-Jan-11	Permanent	SC
10	Programme Assistant/ Farm Manager	Ms. Savithara H.T	Farm Manager	F	-	BSc (Horti.)	18000 consolidated	-	27-Aug-15	Temporary	SC
11	Assistant	Mrs.K.B. Accamma	Assistant	F	-	M. Com, BLISC	16000-29600	16000	24-Jul-13	Permanent	GM
12	Jr. Stenographer	Mr. Santhosh Kumar	Jr. Stenographer	M	-	B Com	14550 consolidated	-	-	Temporary	GM
13	Driver	Mr. Hanumantharayappa	Driver (HV)	M	-	SSLC	11600-21000	12000	25-Aug-12	Permanent	GM
14	Driver	Mr. B. Mallikarjunaiah	Tractor Driver	M	-	SSLC	14550-26700	16800	18-Feb-10	Permanent	GM
15	Supporting staff	Mr. L. Manjaiah	Cook/care taker	M	-	SSLC	10400-16400	11600	20-Oct-08	Permanent	SC
16	Supporting staff	Ms. Divya S.V.	Messenger	F	-	MBA	9600 consolidated	9600	08-Jan-16	Temporary	GM

1.6. Total land with KVK (in ha):23 ha

S. No.	Particulars	Area (ha)
1	Under Buildings	03
2.	Under Demonstration Units	
3.	Under Crops	20
4.	Orchard/Agro-forestry	
5.	Others	

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR UAS	22.02.2012	-	55,00,000 25,00,000	-	-	-
2.	Farmers Hostel	ICAR	22.12.2012	550	53,00,000	-	-	-
3.	Staff Quarters	-	-	-	-	-	-	-
4.	Demonstration Units	-	-	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	
6	Rain Water harvesting system	-	-	-	-		-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
JeepMahindra BOLERO	2004	5,00,000	284287	Not in good condition
Tractor Massey Ferguson	2002	3,80,000	3850.2 (hours)	Not in good condition
BikeTVS Star City (ICAR, 79 / III)	2006	40,000	31823	Good
Honda Activa (ICAR, 7 / IV)	2009	50,000	40570	Good

C) Equipment's& AV aids

Sl. No.	Name of Equipments	Year of purchase	Cost (Rs.)	Present status
1	Photo Copier (Toshiba)	30-03-2009	77,954	Not working
2	Generator (10 KV)	01-04-2002	86,100	Good
3	Over Head Projector (OHP)	28-05-2002	15,976	Good
4	Camera Pentax –SLR	31-07-2002	25,000	Good
5	Public Address System	31-07-2002	21,500	Good
6	Kodak Ektalite Slide Projector with slide tray	05-04-2003	47,125	Good
7	Philips TV 21 inches + VGuard Stabilizer	20-05-2003	12,513 + 882	Good
8	Philips DVD Player 625 K	20-05-2003	8,276	Good
9	LYNX Stevenson Screen Single	04-07-2003	6,000	Good
10	Trolley Stand	05-04-2003	7,655	Good
11	Bee hive boxes (12 nos.)	06-01-2003	7,800	Good
12	Nova easy carry display system (1 set)	06-01-2003	14,000	Good
13	Nova cardinal writing board (3' x 4')	05-04-2003	5,742	Good
14	HP Deskjet 3745 Printer	12-03-2005	3,400	Good
15	HP Scanjet 2400 Scanner	12-03-2005	4,400	Not working
16	Thoshiba Projector	14-06-2007	60,106	Good
17	Honda weed cutter	17-02-2009	30,000	Good
18	Panasonic fax machine	21-01-2011	15200	Good
19	HP Lasejet 1020plus printer	28-02-2012	7,350	Good
20	Computer (Intel Pentium)	21-01-2013	14000	Good
21	CANON Laser printer	21-01-2013	5200	Good
22	Digital Sony camera MDSEW 320	21-01-2013	25000	Good
23	Acer desktop computer	28-02-2013	32,150	Good
24	DSC coolpix S 6300 NIKON digital camera	07-03-2013	10,490	Good
25	NIKON coolpix P530 camera	13-03-2013	19,991	Good
26	Chaff cutter machine	Feb.2016	25,300	Good
27	Epson multifunction printer	Feb.2016	13,999	Good
28	Seagate external hard drive	Feb.2016	6,500	Good
29	Xerox machine	Mar.2016	99,000	Good
30	Kent water guard	Nov.2016	16,000	Good
31	Digital electrical conductivity meter	11-03-2017	15,845	Good
32	UPS system	Jan.2017	81,994	Good
33	Trolley Speakers	March 2017	18,000	Good
34	Projector screen	Jan. 2017	5,500	Good
35	Computers	Feb.2017	80,971	Good
36	Interactive Board	Mar.2017	30,595	Good
37	CCTV camera	Mar.2017	59,513	Good
38	Mini Laptop	March 2017	14,028	Good
39	Tablet	March 2017	8,177	Good

40	Office Chairs	Feb.2017	59,991	Good
41	AC unit	March 2017	27,995	Good
42	Kiosk Tent	March 2017	10,000	Good
43	Hydrophonic unit	March 2017	70,000	Good
44	Neelkamal Chairs	March 2017	10,611	Good
45	Projector screen	Jan.2017	5,500	Good
46	FTTH connection	March 2017	12,000	Good

1.8.Details SAC meeting conducted in 2016-17

Sl.No.	Date	Number of Participants	No.of absentees	Salient Recommendations	Action taken
1.	27.02.2016	82	3	1. Introduce Small Scale Copra driers and conduct training programmes on coconut value addition 2. Establishment of Small Scale Hatchery Unit at farmers level 3. Create awareness on Safety Measures of Palm Climbing Machine 4. Bring out literature on a decade of service of KVK, Konehalli 5. Conduct training programme to mothers of anganawadi children regarding nutritional aspect 6. Organize more number of training programmes on organic farming and tamarind value addition 7. Create awareness on E-Marketing 8. promote minor millets production, processing and value addition 9. Create awareness among farmers and extension personal on pomegranate cultivation 10. Promote biofuel crops like Honge, Neem, Hebbevu, Simaruba etc., 11. Mass multiplication of grafted seedlings of Jamoon and Jack at KVK farm 12. Organize training programmes in organic farmingvillages in association with NGO's 13. Income generating activities/ entrepreneurship development programme need to be addressed 14. Organize training programme on Mushroom production & bakery products 15. Provide publicity of KVK activities through magazines, whatsup, and other multimedia 16. Create awareness on Financial literacy & also facilitiesavailable to farmers with respect to banking & departments of Small Scale Industry & Commerce 17. Upload database of progressive farmers to KVK website 18. Organize training on Micro irrigation management	Action is initiated for all recommendations during 2016-17

PART II - DETAILS OF DISTRICT

2.1 Major farming systems/Enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Finger millet, Paddy, Ground nut, Redgram, Coconut, Vegetables, Arecanut, Dairying, Sericulture

2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Sl. No	Agro-climatic Zone	Characteristics
1	**Central DryZone (Zone - 4)** Madhugiri, Pavagada, Sira, Koratagere, Tiptur and C.N. Halli taluks	Red sandy soil mixed with clay soil and patches of black soil Average rain fall 606.81 mm Source of irrigation are small tanks &borewells
2	**Eastern DryZone (Zone -5)** Tumakuru and Gubbi taluk	Red clay loam and clay lateritic soil Average rainfall 768.16 mm Source of irrigation are tanks, wells and borewells
3	**Southern DryZone (Zone-6)** Kunigal and Turvekere taluk	Red sandy soil mixed with clay soil. Average rainfall 750.56 Source of irrigation are small tanks and borewells

S. No	Agro ecological situation	Characteristics
1	Agro Eco Sub Region-1	Hot moist, semiarid with LGP 150-180 days (LGP-length of growing period)

2.3 Soil types

S. No	Soil type	Characteristics	Area (ha)
1	Red sandy loam	Soil contains 75-80% sand, silt 5-15% and clay 16-20%. Depth of the soil is shallow to medium. The clay fraction of red soils is rich in kaolinitic type of clay minerals, medium in fertility	6, 15,230
2	Shallow black soils	Depth of the soil is shallow, water holding capacity is poor, low fertility	2, 45,432
3	Red loamy soils	Red loams characterized by argillaceous soils with a cloddy structure and the presence of only a little concretionary material. Soils contain 31 – 34 % sand and 44 to 47% silt and 22 to 25 % clay, medium to high fertility. "N" is below 0.1 percent	2, 04,093

2.4. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crops	Area (ha.)	Production (Qtl.)	Productivity (Kg/ha.)
1	Paddy	6797	258290	3800
2	Ragi	162274	251525	1550
3	Minor millets	3303	4128	850
4	Red gram	9890	4128	1200
5	Horse gram	11460	5180	550
6	Black gram	604	193	320
7	Green gram	13377	4348	550
8	Cow pea	4495	1686	650
9	Field bean	8009	2523	2600
10	Ground nut	65187	42567	650
11	Sesamum	662	119	350
12	Castor	1838	783	850
13	Coconut	145,616	123770 (lakh)	60 (No./palm)
14	Arecanut	32,341	43,691	1100
15	Mango	15,152	151,520	10000
16	Banana	5,174	127346	24600
17	Tomato	1,733	92,923	53000
18	Brinjal	354	11,371	12120
19	Chilli	912	13,204	29300

(**Source:** Dept. of Agriculture, Tumakuru)

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 16	8.5	34.58	22.28	86.42
May 16	89.1	33.28	21.61	86.33
June 16	124.0	31.09	21.72	84.58
July 16	152.1	28.59	21.53	84.23
August 16	32.1	29.74	21.38	87.54
September 16	36.7	28.23	19.65	81.72
October 16	21.8	28.63	19.76	86.91
November 16	4.8	26.23	16.65	88.72
December 16	36.1	27.75	21.54	82.94
January 17	6.3	24.53	13.86	89.42
February 17	0.6	32.19	16.98	78.75
March 17	12.4	35.36	18.63	74.33

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	63704	54	5.5745
Indigenous	440888	56	2.0671
Buffalo	217528	68	2.5382
Sheep **meat 000 tons**			
Crossbred	9		--
Indigenous	884643	17.31	--
Goats	322373	16.60	--
Pigs	-	-	-
Crossbred	905	0.23	--
Indigenous	12411		--
Rabbits	560	NA	--
Poultry **Egg production in lakhs**			
Hens		--	--
Desi	6,42,382	273	--
Improved	-	71	--
Ducks	-	-	-
Turkey and others	-	-	-

Category	Area	Production	Productivity
Fish	-		
Marine	-		
Inland	1306 ha	16,000 metric ton	650-700 kg/ha
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

2.7 **District profile has been Updated for 2016-17 Yes / No:** Yes

2.8 Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Tiptur	Honnavalli	Pattrehalli Thimmalapura Nayakenalli Chikkabidare Sidlehalli Madihalli Jakkanahalli Hirebidare Biligere palya Bennenahalli	3 year	Millets Redgram Castor Ragi, Chilli, IFS Chilli Cattle Mushroom and Amla products and marketing	Low soil fertility, poor nutrient management practices and low yield Incidence of pod borer menace Use of local and old varieties, yield decline due to pest semilooper Neck and finger blast, Lack of knowledge on value addition Low productivity Low income to run family Less profit and high incidence of Mastitis Low Income generating activities for SHG's Less awareness on Processing and value addition of agriculture and horticulture produce	Enhancing crop productivity through soil, pestand disease management. Improved animal husbandry practices Income generating activities for SHG's Processing and value addition of agriculture and horticulture produce
2	Turvekere	Mayasandra	Devihalli Mavinkere Dhabbegatta Obenagasandra J.Mallenahalli	3 year	Bengalgram Tomato Banana Arecanut	Inefficient use of paddy fallows Use of local and old varieties, improper control measures for pod borer Low yield, Lack of HYVs, Improper nutrient management Less productivity, incidence of pest and diseases Improper plant protection measures for wilt including use of tolerant variety Severe nut splitting and yield loss due to deficiency of boron	Introduction of high yielding varieties Nutrient and water management
3	C.N. Halli	Shettikere	Shettikere Kuppur Thamadihalli Gopalanahalli	3 year	Groundnut Millet crops Coconut Vegetable	Low soil fertility, high weed infestation and lower income Low yield potential of existing ruling varieties Lack of awareness on branding and labeling of millet products Severe incidence of Basal stem rot leading to death of palm Inefficient use of space, and lower income from mono cropping	Enhancing productivity through introduction of high yielding variety and pest management and other improved packages Processing and value addition of agriculture and horticulture produce

4	Gubbi	Nittur	Muganahunase Chelur Kadaba Belavatha Hosakere Adalagere	3 year	Coconut Arecanut Vegetable Flower crops Sheep farming Poultry	Monocropping, no appropriate use of space and cropping in plantation crops Severe incidence of Red palm weevil and Black headed caterpillar leading to yield decline Inefficient use of space , low soil fertility, heavy weed growth Infestation of fluke worm (Fasciola hepatica), loss of body condition, jowl oedema, pipe stem liver, loss of carcass quality Loss of body condition, improper weight gain, decreased egg production, increase in number of culls, clubbed foot	Enhancing productivity Sustainable income generation through animal husbandry activities
5	Kunigal	Yediyur	Yediyur Kadashettihalli Yalachavadi	3 years	Coconut Vegetable Paddy Finger millet	Low soil fertility, high weed infestation and lower income Low yield potential of existing crop varieties Severe incidence of Basal stem rot leading to death of palm Inefficient use of space, and lower income from mono cropping	Enhancing productivity through introduction of Integrated cop management approach

2.9 Priority thrust areas

S. No	Thrust areas
1	Integrated crop management
2	Integrated nutrient management in agriculture and horticulture crops
3	Integrated pest and disease management
4	Improved Animal Husbandry practices
5	Income generating activities for SHG's
6	Processing and value addition of agriculture and horticulture produce

PART III - TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	5	30	25	15	15	135	135

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
80	88	2800	3067	1100	1395	15000	18718

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Finger Millet(Ragi) : 25	Ragi (M R – 6) : crop failure	Chilli 15,500	Chilli (Arka Meghana, Ulka) 18,500
Redgram(BRG-2) : 1	Redgram (BRG-1) : 1 q.	Tomato 20,000	Tomato (Arka Rakshaka, Alankar) 23,000
	Saame (OLM-203) : Crop failure	Brinjal 4000	Brinjal (Arka Anand) 4,800
	Haraka (PSC- 1) : Crop failure	Drumstick 1000	Drumstick (Bhagya) 1,500
	Navane (SIA- 326) : Crop failure	Papaya 1000	Papaya (Arka Prabhath, Red lady) 1,250
	Horsegram (PHG- 9) : Crop failure		
	Castor (DCH-177) : 80 kg		

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
-	-	Vermicompost: 200 q.	120 q.

3.B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in Sl.No.2.7

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products No. Kg	
1	ICM	Chickpea	Low yield due to wilt (30%) and root rot (8%) incidence	Performance of Chikpea varieties in Tumkur district		2	-	-	1	2.0	-	-	-	
2	ICM	Castor	Low productivity		Integrated crop Management in Castor	2	1	-	2	0.36	-	-	-	
2	ICM	Coconut	Monocropping, no appropriate use of space and Cropping system in flowers crops as intercrop, low income	Assessment of commercial flower crops in coconut based cropping system	Technology capsule for Sustainable production in coconut	3	1	1	1	Flower crops Mucuna seeds – 30 kg	-	-	Neem cake Tricoderma	600 15
3	IPM	Banana	Banana skipper	Assessment of Management Practices for Banana Skipper	-									
4	ICM	Chilli	Low yielding Hybrids, poor nutrient management, flower drops, Murda complex & powdery mildew incidence	-	Integrated Crop Management in Chilli	2	-	-	3	-	-	-	-	-
5	IPM	Paddy	Blast, stem borer, weed menace	-	IPM in paddy	3	-	01	04	-	-	-	-	-
6	INM	Little millet	Low soil fertility, poor nutrient management and low yield	Assessment of nutrient requirement in millet	-	1	-	-	-	-	-	-	-	-
7	ICM	Finger millet	Neck and finger blast and imbalanced nutrition	-	Fingermillet variety ML-365 for drought and blast tolerance	2	-	-	2	1.25	-	-	-	-
8	ICM	Redgram	Delayed sowing, incidence of pest and diseases and Indiscriminate use of PP Chemicals	-	Integrated Crop Management in Redgram	2	-	-	3	0.5	-	-	-	-
9	INM	Paddy	Loss of applied nitrogen (30-40%) Lack of awareness on use of micro nutrients, poor grain filling due to Boron deficiency	-	INM in paddy	03	-	-	1	-	-	-	-	-
10	INM	Arecanut	Severe nut splitting leading to yield loss and non adoption of micronutrients	-	Management of nut splitting in Arecanut	03	-	-	2	-	-	-	-	-
11	Nutrition management	Human Health	Malnutrition including micronutrient deficiencies, leads to permanent damage including impairment of physical growth and mental development 15 % of the children in tumkur district are suffering from mal nutrition	Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition	-	2	-	1	1	-	-	-	-	-
12	Animal Husbandry	Dairy Animals	Non functional ovaries, under developed genitalia, decreased conception rate even after Sexual maturity	-	Management practices in Heifers	2	-	1	2	-	-	-	-	-
13	Animal Husbandry	Dairy Animals	Lower milk yield and quality, fibrosis of the udder	-	Pre and post management of mastitis in dairy cattle	1	-	1	-	-	-	-	-	-
14	Animal Husbandry	Sheep	Incidence of PPR, Hemorrhagic septicemia & Entero Toxemia leading to high mortality & poor productivity in goats	-	Management of Faciolosisi in sheep	1	-	-	2	-	-	-	-	-
15	Animal Husbandry	Poultry	Loss of body condition, improper weight gain, decreased egg production, increase in number of culls, clubbed foot		Management of Leg Weakness in backyard poultry	1	-	-	2	-	-	-	-	-
16	Implements	Weeding tools	Shortage of labours resulting high cost of production	Performance of different weeding tools for drudgery reduction	-	1	-	-	2	-	-	-	-	-

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No.of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Fingermillet variety ML-365 for drought and blast tolerance	UAS, Bengaluru	Finger millet		1	2	1- Method demo, 1- Field day
2	Assessment of Management Practices for Banana Skipper	Annual Technical meet of Entomologists, UAS (B)	Banana	1	-	-	-
3	Performance of Chickpea varieties in Tumkur district	JNKVV, Jabalpur	Chickpea	1	-	2	1- Group discussion, 1- Field day
4	Assessment of commercial flower crops in coconut based cropping system	CPCRI Kasaragod	Coconut	1	-	2	1- Group discussion, 1- Field day
5	Technology capsule for Sustainable production in coconut	UAS (B) / CPCRI	Coconut	-	1	1	1- Group discussion
6	Integrated Crop Management in Chilli	IIHR (B)	Chilli	-	1	-	2- Group discussion
7	Integrated pest management in Paddy	UAS (B)	Paddy	-	1	4	Method demo – 2, Field day -1
8	Assessment of nutrient requirement in millet	UAS (B)/ UAS (D)	Little millet	1	-	1	1- Group discussion
9	INM in paddy	UAS (B)	Paddy	-	1	3	1- Method demo, 1- Field day
10	Management of nut splitting in Arecanut	CPCRI, Kasaragod	Arecanut	-	1	3	2- Method demo
11	Management of Leg Weakness in backyard poultry	KVAFSU, Bidar	Poultry	-	1	1	1- Group discussion, 1- Method demo
12	Management practices in Heifers	NIANP	Dairy	-	1	1	1- Group discussion, 1- Method demo
13	Pre and post management of mastitis in dairy cattle	NDRI	Dairy	-	1	3	1- Group discussion, 1- Method demo
14	Management of Faciolosis in sheep	KVAFSU, Bidar	Sheep	-	1	2	1- Group discussion, 1- Method demo
15	Integrated Crop Management in Redgram	UAS, Bengaluru	Redgram	-	1	2	2- Method demo, 1- Field day
16	Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition	UAS, Dharwad	Human Health	1	-	3	1- Method demo

3.B2 contd..

Sl.No	No. of farmers covered															
	OFT				FLD				Training				Others : Method demonstration, Field day.Group discussion			
	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	18	4	3	2	25	13	4	2	25	12	3	2
2	2	1	1	1	-	-	-	-	15	2	1	2	12	6	2	3
3	3	1	1	-	-	-	-	-	13	4	3	-	14	8	3	2
4	2	2	1	-	-	-	-	-	13	12	2	1	9	8	3	3
5	-	-	-	-	5	1	2	1	25	6	9	3	6	4	2	3
6	-	-	-	-	2	1	2	3	18	10	5	6	5	4	2	1
7	-	-	-	-	7	2	2	1	69	27	19	9	10	4	12	5
8	4	1	-	-	-	-	-	-	26	7	9	7		4	4	2
9	-	-	-	-	6	2	3	1	19	10	21	-	12	5	4	3
10	-	-	-	-	2	1	1	1	23	4	12	2	10	8	2	1
11	-	-	-	-	2	1	5	-	70	13	25	1	10	4	11	12
12	-	-	-	-	3	1	2	-	56	7	27	5	14	12	20	4
13	-	-	-	-	3	1	1	-	76	56	14	9	18	16	10	4
14	-	-	-	-	-	-	4	-	25	6	7	9	21	14	8	2
15	-	-	-	-	17	2	4	2	68	34	34	5	18	12	3	4
16	-	23	-	7	48				-	90	-	29	2	65	4	22

PART IV - On Farm Trial

4.A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	Anganavadi children	TOTAL
Integrated Nutrient Management	1	-	-	-	-	-	-	-	-	-	1
Varietal Evaluation	-	-	1	-	-	-	-	-	-	-	1
Integrated Pest Management	-	-	-	-	-	1	-	-	-	-	1
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-	-	-	-	-	-	-
Farm Machineries	-	-	-	-	1	-	-	-	-	-	1
Integrated Farming System	-	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-	-	-	-	-	-	-
Storage Technique	-	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-	-
Human Health/Nutrition	-	-	-	-	-	-	-	-	-	1	1
Total	1		1		1	1				1	5

4.A2. Abstract on the number of technologies refined in respect of crops: Nil

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	-	-	-	-		-	-	-	-	-
Varietal Evaluation	-	-	-	-		-	-	-	-	-
Integrated Pest Management	-	-	-	-		-	-	-	-	-
Integrated Crop Management	-	-	-	-		-	-	-	-	-
Integrated Disease Management	-	-	-	-		-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-		-	-	-	-	-
Weed Management	-	-	-	-		-	-	-	-	-
Resource Conservation Technology	-	-	-	-		-	-	-	-	-
Farm Machineries	-	-	-	-		-	-	-	-	-
Integrated Farming System	-	-	-	-		-	-	-	-	-
Seed / Plant production	-	-	-	-		-	-	-	-	-
Value addition	-	-	-	-		-	-	-	-	-
Drudgery Reduction	-	-	-	-		-	-	-	-	-
Storage Technique	-	-	-	-		-	-	-	-	-
Mushroom cultivation	-	-	-	-		-	-	-	-	-
Total	-	-	-	-		-	-	-	-	-

4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises: Nil

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-		-
Nutrition Management	-	-	-	-		-
Disease of Management	-	-	-	-		-
Value Addition	-	-	-	-		-
Production and Management	-	-	-	-		-
Feed and Fodder	-	-	-	-		-
Small Scale income generating enterprises	-	-	-	-		-
TOTAL	-	-	-	-		-

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises: Nil

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-		-
Nutrition Management	-	-	-	-		-
Disease of Management	-	-	-	-		-
Value Addition	-	-	-	-		-
Production and Management	-	-	-	-		-
Feed and Fodder	-	-	-	-		-
Small Scale income generating enterprises	-	-	-	-		-
TOTAL	-	-	-	-		-

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers
Integrated Nutrient Management	Little millet	Nutrient management in Little millet	5	5
	-	-	-	-
Varietal Evaluation	Chickpea	Performance of Chickpea varieties	5	5
	-	-	-	-
Integrated Pest Management	Banana	Assessment of Management Practices for Banana Skipper	5	5
	-	-	-	-
Integrated Crop Management	Coconut	Assessment of commercial flower crops in coconut based cropping system	4	4
	-	-	-	-
Integrated Disease Management	-	-	-	-
	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-
	-	-	-	-
Weed Management	-	-	-	-
	-	-	-	-
Resource Conservation Technology	-	-	-	-
	-	-	-	-
Farm Machineries	Vegetables	Different Weeding tools	5	5
	-	-	-	-
Integrated Farming System	-	-	-	-
	-	-	-	-
Seed / Plant production	-	-	-	-
	-	-	-	-
Value addition	-	-	-	-
	-	-	-	-
Drudgery Reduction	-	-	-	-
	-	-	-	-
Storage Technique	-	-	-	-
	-	-	-	-
Mushroom cultivation	-	-	-	-
	-	-	-	-
Nutrition management /Human health	Malnutrition	Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition	3	3

4.B.2. Technologies Refined under various Crops: Nil

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management	-	-	-	-	
	-	-	-	-	
Varietal Evaluation	-	-	-	-	
	-	-	-	-	
Integrated Pest Management	-	-	-	-	
	-	-	-	-	
Integrated Crop Management	-	-	-	-	
	-	-	-	-	
Integrated Disease Management	-	-	-	-	
	-	-	-	-	
Small Scale Income Generation Enterprises	-	-	-	-	-
	-	-	-	-	-
Weed Management	-	-	-	-	-
	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-
	-	-	-	-	-
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
	-	-	-	-	-
Value addition	-	-	-	-	-
	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-
Storage Technique	-	-	-	-	-
	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
	-	-	-	-	-
Total	-	-	-	-	-

4.B.3. Technologies assessed under Livestock and other Enterprises: Nil

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	-	-	-	-
Nutrition management	-	-	-	-
Disease management	-	-	-	-
Value addition	-	-	-	-
Production and management	-	-	-	-
Feed and fodder	-	-	-	-
Small scale income generating enterprises	-	-	-	-
Total			-	-

4.B.4. Technologies Refined under Livestockand other enterprises: Nil

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	-	-	-	-
Nutrition management	-	-	-	-
Disease management	-	-	-	-
Value addition	-	-	-	-
Production and management	-	-	-	-
Feed and fodder	-	-	-	-
Small scale income generating enterprises	-	-	-	-
Total	-	-	-	-

4.C1.Results of Technologies Assessed

Results of On Farm Trial 1: Performance of Chickpea varieties in Tumkur district

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Chickpea	Rainfed	Non availability of high yielding varieties, wilt, root rot and stem borer incidence	Performance of Chickpea varieties in Tumkur district	05	**TO1:** Variety A-1 **TO2:** Variety JG -11 **TO3:** Variety Jaki 9218 **TO4:** Variety JG – 14 **TO5:** GBM-2	**TO1:** Yield (q/ha) No. of pods/plant 100 seed weight (g) Wilt incidence(%) Pod borer incidence(%)	 8.75 18.4 22 10.2 10.6	 Gross cost Rs. / ha : 23000 Gross return Rs. / ha : 43750 Net Returns Rs. / ha : 20750 B:C Ratio: 2.11	Variety JG-14 recorded highest yield (12.37q/ha) followed by Jaki 9218 Higher yield in JG-14 and Jaki 9218 are attributed to higher seed weight and lower incidence of pod borer and wilt	Since for last 3 consecutive years, JG-14 had better performance it can be thought of for replacement	Because of high productivity and high resistance
						TO2: Yield (q/ha) No. of pods/plant 100 seed weight (g) Wilt incidence(%) Pod borer incidence(%)	 10.87 19.5 13.5 2.2 7.5	 Gross cost Rs. / ha : 25625 Gross return Rs. / ha : 54375 Net Returns Rs. / ha : 28750 B:C Ratio: 2.10			
						TO3: Yield (q/ha) No. of pods/plant 100 seed weight (g) Wilt incidence(%) Pod borer incidence(%)	 12.10 29 19.5 4.0 3.3	 Gross cost Rs. / ha : 26325 Gross return Rs. / ha : 60000 Net Returns Rs. / ha : 34375 B:C Ratio: 2.23			
						TO4: Yield (q/ha) No. of pods/plant 100 seed weight (g) Wilt incidence(%) Pod borer incidence(%)	 12.37 27 20.8 1.5 2.0	 Gross cost Rs. / ha : 24250 Gross return Rs. / ha : 61875 Net Returns Rs. / ha : 37625 B:C Ratio: 2.55			
						TO5: Yield (q/ha) No. of pods/plant 100 seed weight (g) Wilt incidence(%) Pod borer incidence(%)	 11.25 25 15.6 1.7 2.1	 Gross cost Rs. / ha : 25250 Gross return Rs. / ha : 56250 Net Returns Rs. / ha : 31000 B:C Ratio: 2.22			

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Technology Assessed	Source of Technology	Production	Grain Yield (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1: Variety A-1	Farmers practice	Yield (q/ha) :	8.75	20750	2.11
TO2: Variety JG -11	JNKVV Jabalpur & ICRISAT	Yield (q/ha) :	10.87	28750	2.10
TO3: Variety Jaki 9218	JNKVV Jabalpur	Yield (q/ha) :	12.10	34375	2.23
TO4: Variety JG – 14	JNKVV Jabalpur	Yield (q/ha) :	12.37	37625	2.55
TO5: GBM-2	UAS, Raichur	Yield (q/ha) :	11.25	31000	2.22

4.C2. Details of On Farm Trial - 1

1 **Title of Technology Assessed**: Performance of Chickpea varieties in Tumkur district

2 **Problem Definition:** Non availability of high yielding varieties, wilt, root rot and stem borer incidence

3 **Details of technologies selected for assessment:**

TO1: Variety A-1
TO2: Variety JG -11
TO3: Variety Jaki 9218
TO4: Variety JG – 14
TO5: GBM-2

4 **Source of technology:** JNKVV Jabalpur, UAS, Raichur

5 **Production system and thematic area:** Integrated crop management

6 **Performance of the Technology with performance indicators:**

Parameters	TO1	TO2	TO3	TO4	TO5
Yield (q/ha)	8.75	10.87	12.10	12.37	11.25
No. of pods/plant	18.4	19.5	29	27	25
100 seed weight (g)	11	13.5	19.5	20.8	15.6
Wilt incidence(%)	10.2	2.2	4.0	1.5	1.7
Pod borer incidence(%)	10.6	7.5	3.3	2.0	2.1

7 **Feedback, matrix scoring of various technology parameters**

done through farmer's participation / other scoring Techniques: Variety JG-14 recorded highest yield (12.37q/ha) followed by Jaki 9218
Higher yield in JG-14 and Jaki 9218 are attributed to higher seed weight and lower incidence of pod borer and wilt

8 **Final recommendation for micro level situation:** Since JG -11 is released during 1999and even incidence of wilt noticed, other newly released varieties can be tried for higher yield and other special features like wilt and drought resistance. In this regard JG – 14 is performed well from last 3 years and GBM-2 tested this year also has better performance.

9 **Constraints identified and feedback for research:** Severe stress in rainfall was observed and with one protective irrigation this result was obtained. Study need to test these varieties under normal season is required.

10 **Process of farmers participation and their reaction:** Farmers showed interest as JG -14 is 7 days shorter duration than JG-11 and also higher yielder. Further GBM-2 also performed good and this variety is fit for mechanical harvesting since crop is erect and main stem is stronger. Farmers were also convinced and told us to give JG-14 for large scale demonstration

4.C1.Results of Technologies Assessed

Results of On Farm Trial 2: Assessment of commercial flower crops in coconut based cropping system

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Coconut	Irrigated	Monocropping, no appropriate use of space and Cropping system in flowers crops as intercrop, low income	Assessment of commercial flower crops in coconut based cropping system	04	TO1: Monocropping TO2: Coconut + Marigold (African yellow) TO3:Coconut+ China Aster (Arka Kamini) TO4:Coconut + Chrysanthemum (Yellow Gold)	**TO1:** Coconut Yield (nuts/ha/year) : No. of functional leaves/palm	 8487 17	Gross cost(Rs./ha): 32560 Gross return(Rs./ha) : 84870 Net Returns (Rs./ha): 59270 B:C Ratio:2.61	Farmers expressed that Coconut with china aster or coconut with chrysanthemum has got more profit with market demand as compared to marigold intercrops in coconut	-	-
						TO2: Coconut Yield (nuts/ha/year) : No. of functional leaves/palm **Marigold Parameter** Flower yield (q/ha) : Plant height (cm): No. of branches : No. of flower / plant : No. of days taken for flower initiation:	 8610 18 22.50 55-65 13-16 85-95 72 days	Gross cost(Rs./ha): 42650 Gross return(Rs./ha): 131100 Net Returns (Rs./ha): 93450 B:C Ratio: 3.07			
						TO3: Coconut Yield (nuts/ha/year) : No. of functional leaves/palm **China AsterParameter** Flower yield (q/ha) : Plant height (cm): No. of branches : No. of flower / plant : No. of days taken for flower initiation:	 8590 19 16.50 45-50 12-14 35-42 66	Gross cost(Rs./ha): 50100 Gross return(Rs./ha): 168400 Net Returns (Rs./ha): 123300 B:C Ratio: 3.36			
						TO4: Coconut Yield (nuts/ha/year) : No. of functional leaves/palm **Chrysanthemum Parameter** Flower yield (q/ha) : Plant height (cm): No. of branches : No. of flower / plant : No. of days taken for flower initiation:	 8632 18 30.50 50-55 10-14 135-145 98	Gross cost(Rs./ha): 62510 Gross return(Rs./ha): 208320 Net Returns (Rs./ha): 150810 B:C Ratio: 3.33			

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Technology Assessed	Source of Technology	Production	Yield	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1: Monocropping	Farmers practice	Coconut Yield (nuts/ha/year) :	8487	59,270	2.61
TO2: Coconut + Marigold	UHSB	Coconut Yield (nuts/ha/year) :	8610	93,450	3.07
		Marigold flower yield (q/ha) :	22.50		
TO3: Coconut+ China Aster (Arka Kamini - IIHR)	CPCRI Kasaragod	Coconut Yield (nuts/ha/year) :	8590	1,23,3000	3.36
		China Aster flower yield (q/ha)	16.50		
TO4: Coconut + Chrysanthemum (Yellow Gold / Kurnool)	CPCRI Kasaragod	Coconut Yield (nuts/ha/year) :	8632	1,50,810	3.33
		Chrysanthemum flower yield (q/ha) :	30.50		

4.C2. Details of On Farm Trial - 2

1 **Title of Technology Assessed**:Assessment of commercial Flower crops in coconut based cropping system

2 **Problem Definition:**Monocropping, no appropriate use of space and Cropping system in flowers crops as intercrop, low income

3 **Details of technologies selected for assessment:**

TO1: Monocropping

TO2: Coconut + Marigold (African yellow)

TO3:Coconut+ China Aster (Arka Kamini)

TO4:Coconut + Chrysanthemum (Yellow Gold)

4 **Source of technology:**CPCRI Kasaragod

5 **Production system and thematic area:** Cropping system

6 **Performance of the Technology with performance indicators:**

TO1:	Coconut Yield (nuts/ha/year) :	8487
TO2:	Coconut Yield (nuts/ha/year) :	8610
	Marigold flower yield (q/ha) :	22.50
TO3:	Coconut Yield (nuts/ha/year) :	8590
	China Asterflower yield (q/ha)	16.50
TO4:	Coconut Yield (nuts/ha/year) :	8632
	Chrysanthemumflower yield (q/ha) :	30.50

7. **Feedback, matrix scoring of various technology parametersdone through farmer's participation / other scoring Techniques:** Farmers expressed that Coconut with china aster or coconut with chrysanthemum has got more profit with market demand as compared to marigold intercrops in coconut

8 **Final recommendation for micro level situation:**Adoption of technology TO3 and TO4 has higher profit with market demand

9 **Constraints identified and feedback for research:** Lack of availability of labours and scarcity of water for irrigation

10 **Process of farmers participation and their reaction:**

4.C1.Results of Technologies Assessed

Results of On Farm Trial 3: Assessment of Management Practices for Banana Skipper

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Banana	Irrigated	Banana skipper	Assessment of Management Practices for Banana Skipper	05	**TO1:** Spraying with chlorpyriphos 20 EC @2.5 ml/lt **TO2:** Spraying with Quinalphos @ 2ml/lt + spreader 1ml/lt **T3:** Spraying with Dichlorvas @ 2ml/lt +spreader 1ml/lt Safe, contact & fumigant	The trial on management Practices for Banana Skipper could not be implemented due to non occurrence of the pest during the season					

4.C1.Results of Technologies Assessed

Results of On Farm Trial 4: Assessment of nutrient requirement of Little millet

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Little millet	Rainfed	Low soil fertility, Poor nutrient management practices, Low yield	Assessment of nutrient requirement of Little millet	07	T1-Application of two bags of DAP at the time of sowing and one bag of urea at top dressing T2-Recommended practice 20:20: 0 Kg NPK/ha at sowing T3-Application of 30:15:15 Kg NPK/ha, 50%N, full dose of P and K at sowing and 50 % N top dressing at 30 DAS	Crop dried due to severe moisture stress					

Technology Assessed	Source of Technology	Production	Grain Yield (q/ha)/ Straw Yield (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1: Application of DAP at the time of sowing	Farmers practice	-	-	-	-
TO2: Recommended practice 20 : 20 : 0 NPK kg /ha	UAS, Bengaluru	-	-	-	-
TO3:Application of 30 : 15 : 15 NPK kg / ha	UAS, Dharwad	-	-	-	-

4.C1.Results of Technologies Assessed

Results of On Farm Trial 5: Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter			Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
							Before	After	Improvement				
1	2	3	4	5	6	7				9	10	11	12
Human health	---	Malnutrition including micronutrient deficiencies, leads to permanent damage including impairment of physical growth and mental development 15 % of the children in tumkur district are suffering from mal nutrition	Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition	04	**TO:** Non formal education with supplementary nutrition in Anganawadies **TO2:** TO 1+Additional teaching and extension materials **TO3:** TO 1+Training and Method demonstration on enriched foods using regional foods **TO4:** TO 1+Family counseling	**TO1:** KAP text score (%) Height (cm) weight (kg) MUAC (cm)	 54 103.49 12.60 14.55	 64 107.29 13.35 15.34	 10 3.76 0.75 0.79	-	Family Counselling followed by method demonstration is more effective than the other teaching method	-	-
						TO2: KAP text score (%) Height (cm) weight (kg) MUAC (cm)	 55 110.88 12.35 14.30	 74 115.00 14.35 15.00	 19 4.12 2.00 0.7	-			
						TO3: KAP text score (%) Height (cm) weight (kg) MUAC (cm)	 59 106.41 13.12 14.30	 75 110.69 15.33 15.53	 16 4.28 2.21 1.23	-			
						TO4: KAP text score (%) Height (cm) weight (kg) MUAC (cm)	 58 112.50 13.85 15.00	 78 117.62 16.35 16.54	 20 5.12 2.5 1.54	-			

Contd..

Technology Assessed	Source of Technology	Production	Grain Yield (q/ha)/ Straw Yield (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO: Non formal education with supplementary nutrition in Anganawadies	Regular practice in anganawadies	-	-	-	-
TO2: TO 1+Additional teaching and extension materials	Food and Nutrition Board	-	-	-	-
TO3: TO 1+Training and Method demonstration on enriched foods using regional foods	UAS, B	-	-	-	-
TO4: TO 1+Family counseling	UAS, D	-	-	-	-

4.C2. Details of On Farm Trial - 5

1**Title of Technology Assessed**: Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition

2 **Problem Definition:** Malnutrition including micronutrient deficiencies, leads to permanent damage including impairment of physical growth and mental development 15 % of the children in tumkur district are suffering from mal nutrition

3 **Details of technologies selected for assessment:**

TO: Non formal education with supplementary nutrition in Anganawadies
TO2: TO 1+Additional teaching and extension materials
TO3: TO 1+Training and Method demonstration on enriched foods using regional foods
TO4: TO 1+Family counseling

4 **Source of technology:** Food and Nutrition Board, UAS, Bangalore, UAS, Dharwad

5 **Production system and thematic area:** Human health

6 **Performance of the Technology with performance indicators:** Family counseling is more effectivecompared to other teaching methods

7 **Feedback, matrix scoring of various technology parameters**

done through farmer's participation / other scoring Techniques :

8 **Final recommendation for micro level situation:**Family counscilling is the best method to improve the nutritional status of children

9 **Constraints identified and feedback for research:** Convincing mothers of anganawadi children is little bit difficult and most of the malnourished children are not available in anganawadi

10 **Process of farmers participation and their reaction:** Good

4.C1.Results of Technologies Assessed

Results of On Farm Trial 6: Performance of different weeding tools for drudgery reduction

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Weeding implements	---	Weed management, drudgery and labour scarcity	Performance of different weeding tools for drudgery reduction	04	T1- Hand weeding T2- Cycle weeder T3- Twin wheel hoe hand weeder T4- Balram weeder	TO1: Area Covered/ Man day Time required(hrs per acre) Man days/ acre Labour cost(Rs.) Back pain:	-	0.11 75.00 9.4 1880 severe back pain	Saves time, less drudgery, less expenditure for labour but requires soil moisture to operate the weeders. Cycle weeder is best in saving labour, time and drudgery but requires optimum soil moisture followed by Twin wheel hoe weeder	-	-
						TO2: Area Covered/ Man day Time required(hrs. per acre) Man days/ acre Labour cost(Rs.) Back pain:	-	0.33 34.00 4.25 850 less back pain			
						TO3: Area Covered/ Man day Time required(hrs per acre) Man days/ acre Labour cost(Rs.) Back pain:	-	0.20 52.91 6.61 1322 very less back pain			
						TO4: Area Covered/ Man day Time required(hrs. per acre) Man days/ acre Labour cost(Rs.) Back pain:	-	0.19 61.25 7.65 1530 less back pain			

Contd..

Technology Assessed	Source of Technology	Production	Grain Yield (q/ha)/ Straw Yield (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T1- Hand weeding	Farmers Practice	-	-	-	-
T2- Cycle weeder	ZARS, Hiriyur	-	-	-	-
T3- Twin wheel hoe hand weeder	CIAE, Bopal	-	-	-	-
T4- Balram weeder	TNAU, Tamilnadu	-	-	-	-

4.C2. Details of On Farm Trial - 1

1**Title of Technology Assessed**: Performance of different weeding tools for drudgery reduction

2 **Problem Definition:** Weed management, drudgery and labour scarcity

3 **Details of technologies selected for assessment:**

T1- Hand weeding

T2- Cycle weeder

T3- Twin wheel hoe hand weeder

T4- Balram weeder

4 **Source of technology:** Farmers Practice,ZARS, Hiriyur , CIAE, Bopal , TNAU, Tamilnadu

5 **Production system and thematic area:** Weeding implements

6 **Performance of the Technology with performance indicators:** Cycle weeder is the best

7 **Feedback, matrix scoring of various technology parameters**

done through farmer's participation / other scoring Techniques :

8 **Final recommendation for micro level situation:**cycle weeder is the best in case of saving labour and time and in reducing drudgery. Balram weeder is easy to operate for women and remove the weeds between plants also but consumes more time

9 **Constraints identified and feedback for research:** All weeding implements effective with little soil moisture so it is necessary to develop weeding implements for dry land

10 **Process of farmers participation and their reaction:** Farm women participation was good and actively involved

4.D1. Results of Technologies Refined : Nil

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined t	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11
-	-	-	-	-	-	-	-	-	-	-

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology Option 1 (best performing Technology Option in assessment)	-	-	-	-	-
Technology Option 2 (Modification over Technology Option 1)	-	-	-	-	-
Technology Option 3 (Another Modification over Technology Option 1)	-	-	-	-	-

4.D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the following details:

1. Title of Technology refined
2 Problem Definition
3 Details of technologies selected for refinement
4 Source of technology
5 Production system and thematic area
6 Performance of the Technology with performance indicators
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8 Final recommendation for micro level situation
9 Constraints identified and feedback for research
10 Process of farmers participation and their reaction

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2016-17

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
Oilseeds		Rainfed	Kharif 2016	Castor	DCH- 177	-	ICM	**Integrated crop management in castor** Soil test based nutrient management Nipping Need based Plant protection chemicals	5	5	2	10	12	-
Pulses														
1	Pulses													
Cereals & Millets														
2	Cereals	Irrigated	Kharif 2016	Paddy	IR- 64	-	IPM	**Integrated pest management in Paddy** Weed management through – Londax power herbicide - 4 kg/ac. Seed treatment with Carbendazim + Mancozeb @ 4 gm/kg Stem-borer management through pheromone traps & Quinolphos @ 0.2%	4	4	0	10	10	-
3	Cereals	Irrigated	Kharif 2016	Paddy	IR- 64	-	INM	**Integrated nutrient management in Paddy** FYM 5t/ha Nitrogen-75% through neem coated urea (basal) + 25% (top dress) Basal application of Phosphorous Potassium 2 splits 50% at basal, 50%before panicle initiation Application of zinc sulphate 20 kg / ha and borax 5 kg / ha	4	4	-	10	10	-
4	Finger millet	Rainfed	Kharif 2016	Finger millet	ML-365	-	ICM	**Integrated crop management in Ragi** Use of neck & finger blast tolerant variety (ML-365) Seed treatment with Biofertilizers- Azospirillum and PSB FYM: 5 t/ha, RDF Micronutrients (ZnSO4 10 kg/ha) Seed production techniques	10	10	4	21	25	severe stress in rainfall resulted in failure of crop
Vegetables														
5	Vegetables	Irrigated	Rabi 2016	Chilli	Arka Meghana	-	ICM	**Integrated Crop Management in Chilli** Use of Hybrid Arka Meghana, Use of Arka microbial consortium, portray method of seedling production, Foliar spray of Vegetable Special, Application of neem cake, Carbendazim, spray with Imidachloprid	2	2	3	7	10	-
5	Vegetables	-												
7	Vegetables	Irrigated												
Flowers														
Ornamental														

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
Fruit crops														
8	Fruit	Rainfed												
Spices and condiments														
Commercial														
Medicinal and aromatic														
Fodder														
Plantation														
9	Plantation	Irrigated	Perennial	Arecanut	Local	-	INM	**Management of Nut Splitting in Arecanut** Application of FYM 12 kg / tree + RDF 100:40:140 NPK g / tree + Borax 30 g / tree	2	2	-	5	5	-
10	Plantation	Irrigated	perennial	Coconut	Tiptur tall	-	ICM	**Technology capsule for Sustainable production in coconut** Soil test based nutrient application Lucrne as intercrops(leguminacea) which improve soil N content and also used for nutritive fodder for animal . Soil application of Neem cake @ 5 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year Burial of coconut husk splits in the trench with convex husk splits facing upwards in 2-3 layers and covering with soil surface mulching with dried coconut leaves Root feeding with Hexaconazole @ 3ml in 100ml water Use of pheromone traps for RPW & RB.	2	2	2	8	10	-
11	Dairy	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Dairy	When problem persist	-	-	HF cross	-	-	Management practices in Heifers	5 (animals)	5 (animals)	2	3	5	-
13	Dairy	When problem persist	-	-	HF cross	-	-	Pre and post management of mastitis in dairy cattle	10 (animals)	10 (animals)	3	4	7	-
	Poultry	When problem persist	-	-	Backyard poultry	-	-	Management of Leg Weakness in backyard poultry	200 (birds)	200 (birds)	4	6	10	-
	Rabbitry	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pigerry	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Sheep and goat	when problem persist	-	-	Backyard poultry	-	-	Management of Faciolosisi in sheep	50 (sheep)	50 (sheep)	4	1	5	-
	Others (Fodder)	-	-	Fodder crops	COFS-29, Lucerne, multi cut sorghum, DHN-18, BH-18	-	-	Fodder Bank	5	5	1	4	5	-

5.A. 1. Soil fertility status of FLDs plots during 2016-17

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil			Previous crop grown
									N	P	K	
1	Oilseeds	Rainfed	Kharif 2016	Castor	-	DCH-177	ICM	**Integrated crop management in castor** Soil test based nutrient management Nipping Need based Plant protection chemicals	Medium	Low	Medium	Finger millet
2	Cereals	Rainfed	Kharif 2016	Finger millet	ML-365	-	ICM	**Integrated crop management in Ragi** Use of neck & finger blast tolerant variety (ML-365) Seed treatment with Biofertilizers- Azospirillum and PSB FYM: 5 t/ha, RDF Micronutrients (ZnSO4 10 kg/ha) Seed production techniques	Low	Medium	Medium	Horsegram
	Cereals	Irrigated	Kharif 2016	Paddy	IR- 64	-	IPM	**Integrated pest management in Paddy** Weed management through – Londax power herbicide - 4 kg/ac. Seed treatment with Carbendazim + Mancozeb @ 4 gm/kg Stem-borer management through pheromone traps &Quinolphos @ 0.2%	High	Medium	Low	Paddy
	Cereals	Irrigated	Kharif 2016	Paddy	IR- 64	-	INM	**Integrated nutrient management in Paddy** FYM 5t/ha Nitrogen-75% through neem coated urea (basal) + 25% (top dress) Basal application of Phosphorous Potassium 2 splits 50% at basal, 50%before panicle initiation Application of zinc sulphate 20 kg / ha and borax 5 kg / ha	High	Low	Medium	Paddy
3	Vegetables	Irrigated	Rabi 2016	Chilli	-	Arka Meghana	ICM	**Integrated Crop Management in Chilli** Use of Hybrid Arka Meghana, Use of Arka microbial consortium, portray method of seedling production, Foliar spray of Vegetable Special, Application of neem cake, Carbendazim, spray with Imidachloprid	Low	Medium	Low	Brinjal, French bean
4	Plantation	Irrigated	perennial	Coconut	Tiptur tall	-	ICM	**Technology capsule for Sustainable production in coconut** Soil test based nutrient application Lucrne as intercrops(leguminacea) which improve soil N content and also used for nutritive fodder for animal . Soil application of Neem cake @ 5 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year Burial of coconut husk splits in the trench with convex husk splits facing upwards in 2-3 layers and covering with soil surface mulching with dried coconut leaves Root feeding with Hexaconazole @ 3ml in 100ml water Use of pheromone traps for RPW & RB.	Low	Medium	Medium	Coconut
		Irrigated	Perennial	Arecanut	Local	-	INM	**Management of Nut Splitting in Arecanut** Application of FYM 12 kg / tree + RDF 100:40:140 NPK g / tree + Borax 30 g / tree	Medium	Low	Low	Arecanut

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Finger millet	**Integrated crop management in Ragi** Use of neck & finger blast tolerant variety (ML-365) Seed treatment with Biofertilizers- Azospirillum and PSB FYM: 5 t/ha, RDF Micronutrients (ZnSO4 10 kg/ha) Seed production techniques	ML-365	-	Rainfed	25	10	Failure of crop due to severe moisture stress												
Paddy	**Integrated pest management in Paddy** Weed management through – Londax power herbicide - 4 kg/ac. Seed treatment with Carbendazim + Mancozeb @ 4 gm/kg Stem-borer management through pheromone traps &Quinolphos @ 0.2%	IR -64	-	Irrigated	10	4	60.00	48.00	54.00	43.50	24.13	41000	68200	27200	1.66	38000	52200	24700	1.37
Paddy	**Integrated nutrient management in Paddy** FYM 5t/ha Nitrogen-75% through neem coated urea (basal) + 25% (top dress) Basal application of Phosphorous Potassium 2 splits 50% at basal, 50%before panicle initiation Application of zinc sulphate 20 kg / ha and borax 5 kg / ha	IR -64	-	Irrigated	10	4	61	49	55	43	27.90	46000	71500	25500	1.55	40000	55900	15900	1.39
Castor	**Integrated crop management in castor** Soil test based nutrient management Nipping Need based Plant protection chemicals	-	DCH-177	Rainfed	12	5	7.20	5.30	6.25	5.75	8.69	16500	31250	14750	1.89	17350	28730	11380	1.65

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Vegetable	**Integrated Crop Management in Chilli** Use of Hybrid Arka Meghana, Use of Arka microbial consortium, portray method of seedling production, Foliar spray of Vegetable Special, Application of neem cake, Carbendazim, spray with Imidachloprid	-	Arak Meghana	Irrigation	10	2	268	202	226	182	24.18	84000	203400	119400	2.41	82000	163800	81800	2.00
Plantation	**Technology capsule for Sustainable production in coconut** Soil test based nutrient application Lucrne as intercrops(leguminacea) which improve soil N content and also used for nutritive fodder for animal . Soil application of Neem cake @ 5 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year Burial of coconut husk splits in the trench with convex husk splits facing upwards in 2-3 layers and covering with soil surface mulching with dried coconut leaves Root feeding with Hexaconazole @ 3ml in 100ml water Use of pheromone traps for RPW & RB.	Tiptur tall	-	Irrigation	10	2	10850 nuts/ha	7810 nuts/ha	8856 nuts/ha	7749 nuts/ha	14.29	35,540	88,560	53,020	2.49	36,500	77,490	40,990	2.12
Plantation	**Management of Nut Splitting in Arecanut** Application of FYM 12 kg / tree + RDF 100:40:140 NPK g / tree + Borax 30 g / tree	Local	-	Irrigated	5	2	16.20	14	15.10	13.20	14.39	120000	422800	302800	3.52	115000	369600	254600	3.21
Others (Fodder)	Fodder bank	COFS-29, Lucerne, multi cut sorghum, DHN-18, BH-18	-	-	5	2.5	90.05 t/demo	70.05 t/demo	80.08 t/demo	-	-	30000	80500	50500	1: 2.68	-	-	-	-

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/diseases etc.)

	Data on other parameters in relation to technology demonstrated		
Title of FLD	**Parameter with unit**	**Demo**	**Check**
Integrated crop management in ragi	Number of tillers / plant	3.50	3.10
Integrated crop management in Castor	Number of spikes / plant	20	18
	Length of spikes (cm)	40	23
	Number of capsules / spike	70	35
	Semi looper damage %	3.5	8
Integrated pest management in Paddy	Stem borer infestation %	6.5	10.4
	Blast incidence %	5.5	12.0
	Weed density (no./sq. mtr)	5	20
Technology Capsules for Sustainable Production in Coconut	No. of functional leaves/palm	18	15
	No. of leaves drooped/ palm	3.67	8.34
	Weed density (no./sq. mtr)	30	228
	Red Palm Weevil trapped	15	-
	Rhinoceros Beetle trapped	8	-
Integrated Nutrient Management in Chilli	Fruit length (cm)	9.5	8
	Fruit width (cm)	2.0	1.3
	Fruit weight / plant (g)	750	680
	No. of fruits / plant	120	102
Management of Nut Splitting in Arecanut	% nut splitting	16	23
	Boron status (ppm)	0.38	0.40
	Soil fertility status	**Initial**	**Final**
	pH	7.70	7.72
	Electrical Conductivity (ds/m)	0.27	0.25
	Organic Carbon (%)	0.39	0.39
	Available Nitrogen (kg/ha)	398	385
	Available Phosphorus (kg/ha)	25	27
	Available Potassium (kg/ha)	109	106
Integrated nutrient management in Paddy	Soil fertility status	Initial	Final
	pH	8.38	8.36
	Electrical Conductivity (ds/m)	0.36	0.37
	Organic Carbon (%)	0.45	0.45
	Available Nitrogen (kg/ha)	583	579
	Available Phosphorus (kg/ha)	17	15
	Available Potassium (kg/ha)	198	206

5.B.2. Livestock and related enterprises:

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit)				*Economics of check (Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy	Management practices in Heifers	HF cross	05	1 animal / demo	-	-	-	-	-	13600	-	-	-	9600	-	-	-
Dairy	Pre and post management of mastitis in dairy cattle	HF cross	10	1 animal / demo	-	-	-	-	-	2,05,000	3,37,500	1,32,500	1:1.64	1,95,000	2,25,000	30,000	1:1.15
Poultry	Management of Leg Weakness in backyard poultry	Local poultry birds	10	20 birds / demo	-	-	-	-	-	7350	18400	11,050	1:2.50	6350	13,040	6690	1:2.05
Sheep and goat	Management of Faciolosisi in sheep	Local sheep	5	10 sheep / demo	-	-	-	-	-	8,000	-	-	-	6000	-	-	-

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

	Data on other parameters in relation to technology demonstrated			% increase/ decrease
Title of FLD	Parameter with unit	Demo	Check	
Management of Leg Weakness in backyard poultry	Disease prevalence (%)	5	37	64 % decrease
	Weight gain records (Kg)	1.9	1.4	36 % increase
	Egg production records (No's)	90	62	45 % ncrease
Management practices in Heifers	Age at sexual maturity	14 months	30 months	53% increase
	Conception rate	2 inseminations	7 inseminations	21% increase
Pre and post management of mastitis in dairy cattle	Milk yield (Lt.)	13	10 After recovery	51% increase
	Incidence of mastitis (%)	10	65	49% increase
	Fat %	3.5	2.6	25% increase
Management of Faciolosisi in sheep	Disease prevalence (%)	10	80	90% increase
	Economic loss due to Fasciolosis	-	60-70 %	40% increase
	Weight gain record (Kg)	Average initial weight : 8 kg Average weight after 6 months : 29 kg	Average initial weight : 8 kg Average weight after 6 months : 20 kg	-

5.B.3. Fisheries : Nil

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m^2)	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit) or (Rs./m2)				*Economics of check Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check if any
-	-	-

5.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)				*Economics of check (Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oyster mushroom	**Mushroom Cultivation – IGA activity in SHG group** Method demonstration on cultivation of Mushrooms Branding , Labeling and packaging	FL white	1	-	-	-	26.66 kg/ 10 kg spawn	-	-	5,300	2,940	2,360	1.8	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
										Rs./q							
Finger millet	**Branding and Market linkage to Finger millet value added products**	-	1	1	-	-	-	-	-	7,150	16,000	8,850	2.23	-	-	-	-
Amla	**Processing, Value addition, branding and market linkages to Amla value added products**	-	1	-	-	-	-	-	-	10900	30000	19900	2.75	-	-	-	-

Data on additional parameters other than yield (viz., additional income realized, employment generation, quantum of farm resources recycled etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
-	-	-

5.B.5. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Labour requirement in Mandays (480kg dehusking)		% save	Savings in labour (Rs./ha)	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check			Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

Innovative activity: Development of Para technicians as gross root technocrats (Farmers Friends)- Coconut

No. of beneficiaries/ Trainees	Parameters	Before programme	After programme
	No. of trainees under training programme	340 (From FOCT programme- 14 batches)	10 (Development of Para technicians Training programme)
10	No. of Trainees involved in harvesting of nuts (From selected 10 youth trainees)	10	10
	No. of trainees completely self employed	2	4
	No. of trainees involved in plant protection practices in coconut	2	10
	Amount realized from harvesting of nuts	10,000/- to 12,000/- per month per person	10,000/- to 12,000/- per month per person
	Amount realized from plant protection practices (Rs.)	500/- per month per person for 2 trainees	3,000/- to 4,000/- per person per month from10 trainees
	Amount realized from harvesting and plant protection practices (Rs.)	10,500/- to 12,500/- per month person for 2 trainees	13,000/- to 16,000/- per person per month from10 trainees
Charge for harvesting of nuts: Rs. 30-40 per tree, **Charge for Treatment of disease/ Pest**: Rs. 50-150/- based on type of disease and severity			
Treated pest: Black headed caterpillar, rhinocerous beetle, Red headed caterpillar **Treated Diseases**: Ganoderma wilt, Stem bleeding			

Data on additional parameters other than laboursaved (viz., reduction in drudgery, time etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**
-	-	-

5.B.6.Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	6	1200	-
2	Farmers Training	32	960	-
3	Media coverage	78		
4	Training for extension functionaries	-	-	-
5	Others (Please specify)	-	-	-

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor	Integrated Crop Management in Castor	DCH-177	12	5	7.20	5.30	6.25	5.75	8.69	16500	31250	14750	1.89	17350	28730	11380	1.65
Vegetable crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chilli	Integrated Crop Management in Chilly	Arka Meghana	10	2	268	202	226	182	24.17	84000	203400	119400	2.42	82000	163800	81800	1.99

PART VII. TRAINING

7.A.. Training of Farmers and Farm Women including sponsored training programmes (On campus):

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	1	13	7	20	7	3	10	20	10	30
Micro Irrigation/Irrigation	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	3	28	10	38	4	5	9	32	15	47
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management (Arecanut)	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Horticulture	-	-	-	-	-	-	-	-	-	-
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low value and high volume crop	-	-	-	-	-	-	-	-	-	-
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit - Mango	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	3	84	14	98	7	18	25	91	32	123
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Soil fertility management	3	50	20	70	18	7	25	68	27	95
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated nutrient management	4	94	27	121	20	8	28	114	35	149
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient use efficiency	-	-	-	-	-	-	-	-	-	-
Balanced use of fertilizers	-	-	-	-	-	-	-	-	-	-
Soil and water testing	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Livestock Production and Management	-	-	-	-	-	-	-	-	-	-
Dairy Management	-	-	-	-	-	-	-	-	-	-
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Animal Disease Management	-	-	-	-	-	-	-	-	-	-
Feed and Fodder technology	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing and cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	1	2	32	34	8	15	23	10	47	57
Women empowerment	2	-	42	42	-	46	46	-	86	86
Location specific drudgery production	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	1	-	13	13	-	17	17	-	30	30
Others (pl.specify) TGA on Mushroom	1	-	33	33	-	17	17	-	50	50
Agril. Engineering	-	-	-	-	-	-	-	-	-	-
Farm machinery and its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	2	36	12	48	10	5	15	46	17	63
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides (Trichoderma)	1	41	10	51	9	8	17	50	18	68
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Fisheries	-	-	-	-	-	-	-	-	-	-
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Seed Production	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	1	8	5	13	6	3	9	14	8	22
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom production	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
CapacityBuilding and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	1	17	15	32	15	5	20	32	20	52
Mobilization of social capital	1	24	12	36	15	10	25	39	22	61
Entrepreneurial development of farmers/youths	1	18	9	27	7	3	10	25	12	37
Others (CBO formation)	-	-	-	-	-	-	-	-	-	-
Others (ICT Importance)	-	-	-	-	-	-	-	-	-	-
Agro-forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (Palm climbing and plant protection)	1	15	10	25	10	8	18	25	18	43
TOTAL	**27**	**430**	**271**	**701**	**136**	**178**	**314**	**566**	**447**	**1013**

7.B Training of Farmers and Farm Women including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production	-	-	-	-	-	-	-	-	-	-
Weed Management	1	3	1	4	5	1	6	8	2	10
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	2	58	10	68	16	7	23	74	17	91
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Micro Irrigation/Irrigation	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	1	30	12	42	7	3	10	37	15	52
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Horticulture	-	-	-	-	-	-	-	-	-	-
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low value and high volume crop	4	55	40	95	6	15	21	61	55	116
Off-season vegetables (Tomato)	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management in Tomato	-	-	-	-	-	-	-	-	-	-
Drum stick Bhagya as an profitable intercrop in Coconut	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit (mango)	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	1	8	17	25	7	8	15	15	25	40
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology (Coconut)	-	-	-	-	-	-	-	-	-	-
Production and Management technology (Arecanut)	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Vegetable as a intercrops in Arecanut	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	3	55	12	67	22	8	30	77	20	97
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated nutrient management	5	32	14	46	12	8	20	44	22	66
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient use efficiency	-	-	-	-	-	-	-	-	-	-
Balanced use of fertilizers	-	-	-	-	-	-	-	-	-	-
Soil and water testing	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Livestock Production and Management	-	-	-	-	-	-	-	-	-	-
Dairy Management	11	247	78	325	55	102	157	302	180	482
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Animal Disease Management	-	-	-	-	-	-	-	-	-	-
Feed and Fodder technology	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing and cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery production	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	3	-	33	33	-	17	17	-	50	50
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Agril. Engineering	-	-	-	-	-	-	-	-	-	-
Farm machinery and its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	7	109	97	206	73	22	95	182	119	301
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides – Trichoderma	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl.specify) IPDM	3	84	20	104	51	2	53	135	22	157
Fisheries	-	-	-	-	-	-	-	-	-	-
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Seed Production	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	-	-	-	-	-	-	-	-	-	-
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Mushroom production	3	-	21	21	-	18	18	-	39	39
Apiculture	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
CapacityBuilding and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Agro-forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	**44**	**681**	**355**	**1036**	**254**	**211**	**465**	**935**	**566**	**1501**

7.C. Training for Rural Youths including sponsored training programmes (on campus) :

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	1	8	2	10	5	-	5	13	2	15
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	1	18	2	20	7	3	10	25	5	30
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	2	31	23	54	4	19	23	35	42	77
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other : IGA and Self employment	3	63	20	83	38	15	53	101	35	136
TOTAL	**7**	**120**	**47**	**167**	**54**	**37**	**91**	**174**	**84**	**258**

7.D. Training for Rural Youths including sponsored training programmes (off campus) :

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	5	5	58	63	5	50	55	10	108	118
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify) IGA	2	50	10	61	18	7	25	69	17	86
TOTAL	**7**	**55**	**68**	**124**	**23**	**57**	**80**	**79**	**125**	**204**

7.E. Training programmes for Extension Personnel including sponsored training programmes (on campus) :

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Women and Child care	2	-	38	38	-	23	23	-	61	61
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
Total	2	-	38	38	-	23	23	-	61	61

7.F. Training programmes for Extension Personnel including sponsored training programmes (off campus) : Nil

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-

7.G. Sponsored training programmes conducted :

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	1	13	7	20	7	3	10	20	10	30
1.b.	Commercial production of vegetables	-	-	-	-	-	-	-	-	-	-
2	**Production and value addition**	-	-	-	-	-	-	-	-	-	-
2.a.	Fruit Plants - Mango	-	-	-	-	-	-	-	-	-	-
2.b.	Ornamental plants	-	-	-	-	-	-	-	-	-	-
2.c.	Spices crops	-	-	-	-	-	-	-	-	-	-
3.	**Soil health and fertility management**	-	-	-	-	-	-	-	-	-	-
4	**Production of Inputs at site**	-	-	-	-	-	-	-	-	-	-
5	**Methods of protective cultivation**	-	-	-	-	-	-	-	-	-	-
6	**Others (pl.specify)**	-	-	-	-	-	-	-	-	-	-
7	**Integrated pest and disease management**										

8	**Post harvest technology and value addition**										
8.a.	Processing and value addition	-	-	-	-	-	-	-	-	-	-
8.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
9	**Farm machinery**	-	-	-	-	-	-	-	-	-	-
9.a.	Farm machinery, tools and implements	-	-	-	-	-	-	-	-	-	-
9.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
10.	**Livestock and fisheries**	-	-	-	-	-	-	-	-	-	-
11	**Livestock production and management**	-	-	-	-	-	-	-	-	-	-
11.a.	Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
11.b.	Animal Disease Management	-	-	-	-	-	-	-	-	-	-
11.c	Fisheries Nutrition	-	-	-	-	-	-	-	-	-	-
11.d	Fisheries Management	-	-	-	-	-	-	-	-	-	-
11.e.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
12.	**Home Science**	-	-	-	-	-	-	-	-	-	-
12.a.	Household nutritional security	-	-	-	-	-	-	-	-	-	-
12.b.	Economic empowerment of women										
12.c.	Drudgery reduction of women	-	-	-	-	-	-	-	-	-	-
12.d.	Others (Low cost and nutrient efficient diet designing)										
13	**Agricultural Extension**	-	-	-	-	-	-	-	-	-	-
13.a.	Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
13.b.	Others (Integrated farming)	-	-	-	-	-	-	-	-	-	-
	Total	1	13	7	20	7	3	10	20	10	30

Details of sponsoring agencies involved

1.Department of Agriculture GOK

2. UAS, Bangalore

7.H. Details of Vocational Training Programmes carried out by KVKs for rural youth :

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**	-	-	-	-	-	-	-	-	-	-
1.a.	Commercial floriculture	-	-	-	-	-	-	-	-	-	-
1.b.	Commercial fruit production	-	-	-	-	-	-	-	-	-	-
1.c.	Commercial vegetable production	-	-	-	-	-	-	-	-	-	-
1.d.	Integrated crop management	2	22	-	22	8	-	8	30	-	30
1.e.	Organic farming	-	-	-	-	-	-	-	-	-	-
1.f.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
2	**Post harvest technology and value addition**	1	7	-	7	2	1	3	9	1	10
2.a.	Value addition	-	-	-	-	-	-	-	-	-	-
2.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
3.	**Livestock and fisheries**	-	-	-	-	-	-	-	-	-	-
3.a.	Dairy farming	-	-	-	-	-	-	-	-	-	-
3.b.	Composite fish culture	-	-	-	-	-	-	-	-	-	-
3.c.	Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
3.d.	Piggery	-	-	-	-	-	-	-	-	-	-
3.e.	Poultry farming	-	-	-	-	-	-	-	-	-	-
3.f.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
4.	**Income generation activities**	-	-	-	-	-	-	-	-	-	-
4.a.	Vermi-composting	-	-	-	-	-	-	-	-	-	-

4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.	-	-	-	-	-	-	-	-	-	-
4.c.	Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
4.d.	Rural Crafts	-	-	-	-	-	-	-	-	-	-
4.e.	Seed production	-	-	-	-	-	-	-	-	-	-
4.f.	Sericulture	-	-	-	-	-	-	-	-	-	-
4.g.	Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
4.h.	Nursery, grafting etc.	-	-	-	-	-	-	-	-	-	-
4.i.	Tailoring, stitching, embroidery, dying etc.	-	-	-	-	-	-	-	-	-	-
4.j.	Agril. para-workers, para-vet training	1	7	-	7	3	-	3	10	-	10
4.k.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
5	**Agricultural Extension**	-	-	-	-	-	-	-	-	-	-
5.a.	Capacity building and group dynamics	1	13	7	20	7	3	10	20	10	30
5.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
	Grand Total	5	49	7	56	20	4	24	69	11	80

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	6	290	85	375	70	35	105	2	8	36
Kisan Mela	-	-	-	-	-	-	-	-	-	-
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Exhibition	5	500	120	620	350	90	440	50	20	70
Method Demonstrations	27	158	120	278	12	5	17	3	4	7
Workshop	6	35	19	54	16	18	34	14	8	22
Group meetings	39	20	6	26	2	1	3	3	2	5
Lectures delivered as resource persons	120	300	150	450	20	10	30	2	8	10
Newspaper coverage / Radio / TV	73	-	-	-	-	-	-	-	-	-
Radio talks	-	-	-	-	-	-	-	-	-	-
TV talks	2	-	-	-	-	-	-	-	-	-
Popular articles	15	-	-	-	-	-	-	-	-	-
Extension Literature	15	-	-	-	-	-	-	-	-	-
Research papers	2	-	-	-	-	-	-	-	-	-
Advisory Services	596	210	110	320	25	15	40	26	8	34
Scientists visit to farmers field	83	36	15	51	10	8	18	2	4	6
Farmers visit to KVK	312	200	90	290	5	5	10			
Diagnostic visits	29	22	9	31	4	3	7	2	1	3
Exposure visits	4	85	30	115	8	2	10	4	6	10
Soil health Camp	1	150	30	180	32	15	47	5	2	7
Animal Health Camp	8	256	120	376	5	4	9	6	4	10
Agri mobile clinic (KMAS)	46	3800	400	4200	150	75	225	190	78	268
Soil test campaigns	-	-	-	-	-	-	-	-	-	-
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-
Celebration of important days										
World environment day Breast feeding week Parthenium Awareness Programme Rabi Awareness Programme National Nutrition Week World food day World soil day Farmers day Women in agriculture National science day	6	300	20	320	150	30	180	18	5	23
	1395	**6362**	**1324**	**7686**	**859**	**316**	**1175**	**327**	**158**	**511**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals & millets (crop wise)						
	Ragi	M R – 6	Failure of crops due to severe moisture stress			
	Saame	OLM-203				
	Haraka	PSC- 1				
	Navane	SIA- 326				
Pulses	Redgram	BRG-2	-	1	6000	-
Commercial crops	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others (specify)	-	-	-	-	-	-
oil seeds	Castor	DCH – 177	-	0.8	4800	-
Total				1.8	**10800**	

9.B. Production of planting materials

Crop category	Name of the crop	Variety/ Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Horticulture seedling /s	Chilli	Arka Meghana, Ulka	18,500	11,100	12
	Tomato	Arka Rakshaka, Alankar	23,000	11,500	9
	Brinjal	Arka Anand	4,800	2,400	2
	Papaya	Arka Prabhath, Red lady	1,250	12,500	18
	Drumstick	Bhagya	1,500	15,000	20
Total	-	-	**49,050**	**52,500**	**61**

9.C. Production of Bio-Products :

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	-	-	-	-
Bio-pesticide	-	-	-	-
Bio-fungicide	-	-	-	-
Bio Agents	-	-	-	-
Others	Vermicompost	20000	200000	Used in KVK farm
Total	-	-	-	-

9.D. Production of livestock materials :

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals	-	-	-	-
	HF(Calf)	2	9,000	-
	HF(Milch animal)	1	45,000	
	HF Cross(Calf female)	1	5,000	
	Jessy(Calf) Cross	1	3,500	
	Jessy Cross	1	3,500	
	Jessy calf female	1	4,500	
	Amrith Mahal (Drought cum Milch)	2	41,000	
		1	10,000	
	Amrith Mahal Calf male	1	12,000	
	Amrith Mahal Calf male	1	15,000	
	Amrith Mahal Calf female	4	20,000	
	Sheep male	8	40,000	
	Female			
Buffaloes	-	-	-	-
Calves	-	-	-	-
Others (Pl. specify)	-	-	-	-
Poultry	-	-	-	-
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-

Emu	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
Piggery	-	-	-	-
Piglet	-	-	-	-
Others (Pl.specify)	-	-	-	-
Fisheries	-	-	-	-
Fingerlings	-	-	-	-
Others (Pl. specify)	-	-	-	-
Total	-	-	-	-

PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

10. A. Literature Developed/Published (with full title, author & reference)

(A) **KVK News Letter :** Kalparuksha
Date of start : January 2016
Periodicity :6 months
No. of copies distributed : 300

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers :	Problem experienced by farmers in Arecanut cultivation, *The Asian J.Hort.*Dec.2 (1):301-305.	Nagappa Desai, Sukanya T. S., Mamatha B. and Roopa B. Patil	-
	Integrated pest management in paddy-technology performance in farmer's fields under frontline demonstrations. *International J. Farm Sciences* 7(1):179-181.	Sreenivasa, K.R. and Sukanya T.S.	
Abstracts published in conference proceedings :	Coping with Climate through Varietal Introduction, XIII Agricultural Science Congress, UAS, GKVK, Bengaluru	Sukanya T.S., Srinivasa K.R., Nagappa Desai and Pradeep Kumar H.	
	Minor millets under drought conditions, XIII Agricultural Science Congress, UAS, GKVK, Bengaluru	Sukanya T.S., Roopa Patil, Mamatha B. and Shankara M.H	
	Maximize the return bygrowing drumstick (Bhagya) as intercrops in Coconut garden at farmers field, XIII Agricultural Science Congress, UAS, GKVK, Bengaluru	Nagappa Desai, Sukanya T. S., and Mamatha B.	-
	Evaluation of IPM module for pod borer in field bean. P148. National Conference on Sustainable and self sufficient production of pulses through an integrated approach. UAS Banglore .	Shreenivasa, K.R., Sujith, G.M., Shankara, M.H, and Sukanya, T.S	-

	Dissemination of IPM technologies in redgram through farmer field school. P167. National Conference on Sustainable and self sufficient production of pulses through an Integrated approach. UAS Banglore				Shreenivasa, K.R., Shankara, M.H , and Sukanya, T.S	-
	Performance of chickpea varieties in Tumakuru district. P167. National Conference on Sustainable and self sufficient production of pulses through an Integrated approach. UAS Bangalore .				Sukanya, T.S , Shreenivasa, K.R. and Shankara, M.H	-
	Occurrence of new Pests and Diseases due to Aberration in Climate Change Regime in Tumkur District Karnataka, p 54 XIII Agricultural Science Congress- Climate Smart Agriculture, UAS Bangalore.				Shreenivasa K.R., Sukanya T.S and Shankara M.H	-
	Integrated Pest Management in Paddy p 105. Second KVK Symposium - Frontline Extension Programmes for Realizing Higher Productivity and Profitability in Farming. TNAU, Coimbatore PP158.				Shreenivasa K.R., Sukanya T.S and Shankara M.H,	-
	Impact of Farmer Field School to Redgram Growers Association in Tumkur District Karnataka p 120-121. Second KVK Symposium - Frontline Extension Programmes for Realizing Higher Productivity and Profitability in Farming. TNAU, Coimbatore PP158				Shreenivasa K.R., Shankara M.H and Sukanya T.S	-
Newsletters :	"Kalpavruksha" News letter (January – June 2016)				T.S. Sukanya, M.H. Shankara, K.R. Shreenivasa, Mamatha B, Roopa B Patil,H.B. Shivappanayaka, Arjuman Banu, Pradeep Kumar H	200
	"Kalpavruksha" News letter (July – December 2016)				T.S. Sukanya, M.H. Shankara, K.R. Shreenivasa, Nagappa Desai, Mamatha B, Roopa B Patil,H.B. Shivappanayaka, Arjuman Banu,	200
Technical bulletins :	-				-	-
	Flip chart	Flip chart on nutritional and health of preschool children				
	Technical bulletins	Success stories of progressive farmers and farm women	T.S. Sukanya, M.H. Shankara, K.R. Shreenivasa, Nagappa Desai, Mamatha B, Roopa B Patil,H.B. Shivappanayaka, Arjuman Banu, Pradeep Kumar H	-		
		Nutritious food for women's health	Roopa B Patil, K.R. Shreenivasa, T.S. Sukanya and Mamatha B	-		

		Activities of KVK Konehalli	T.S. Sukanya, M.H. Shankara, K.R. Shreenivasa, Nagappa Desai, Mamatha B, Roopa B Patil,H.B. Shivappanayaka, Arjuman Banu, Pradeep Kumar H			
		Adoption of Integrated farming system	T.S. Sukanya, Mamatha B, M.H. Shankara, K.R. Shreenivasa, Nagappa Desai, Roopa B Patil,H.B. Shivappanayaka			
	Extension literature – leaflets / folder	Mushroom cultivation	Roopa B Patil , T.S. Sukanya, M.H. Shankara,	-		
		Ragi cultivation	T.S. Sukanya, M.H. Shankara, K.R. Shreenivasa, Roopa B Patil	-		
		Malnutrition and its management among preschool children	Roopa B Patil and all KVK scientists			
	Chapters in Books	Nutritious food for Women health In: Book "Sugathri. Published by UAHS Shimoga.	Roopa B Patil, Sreenivasa K.R. and Sukanya T.S. and Mamatha B.			
	Booklet	Integrated farming System-Successful farmers	All Staff			
Others News paper publicity : 78	Training programmes, weather, Pest and Disease forecasting, and other technical information				Team KVK	78

10.B. Details of Electronic Media Produced :Nil

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	CD/DVD	IFSD farmers of Tumkur district -	2
2	CD/DVD	Model Stake Holder	1
3	DVD	CBA on Redgram Association	2

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

1. Tomato(*Solanum lycopersicum* L. Solanaceae.) is an important vegetable crops growing in Tumkuru district of Karnataka state occupied with an area 1733 ha and production 92,923 tones. This low productivity is attributed due to use of low yielding variety/hybrids, poor nutrient management and pest & disease management. Tomato is cultivated during all seasons of the year in Tumkuru district, which gives good returns to the farmers. Krishi Vigyan Kendra, Konehalli, Tiptur conducted frontline demonstrations at farmers field with the objective of convincing farmers and extension functionaries together

about tomato production technologies for further wide scale diffusion keeping in view of an effective extension approach of frontline demonstrations for dissemination of tomato production technology. In this connection, KVK Tiptur has conducted preliminary survey to identify the technology gap in production of tomato. In this regard frontline demonstrations were conducted in Hosapatna, Echanur and lakkihalli villages of Tumkur district with group discussion meeting, training programmes and field visit to farmers field. During training programme, lot of discussion & exchange of view went on various technologies of raising good quality seedling transplanting with proper spacing, integrated nutrient management, integrated disease & peat management.

Title:Integrated crop management in Tomato

Background: Mr. Shivakumar, S. is a progressive farmers of Hosapatna village, aged 42 year having regular attending training programme, Krishimela, group discussion, meeting organised/ conducted by KVK, Konehalli and Dept. of Horticulture. He is also growing various vegetables like tomato, brinjal, chilli but was getting very low yield and low income of Rs. 30,000/ha, from half acre of land. Low yield was due to using poor yielding variety, poor quality seedling production (infected seedling), improper water and nutrient management and also he spent more amount for control of wilt, blight and fruit borer without right pesticides spraying. Hence Krishi Vigyan Kendra suggested him to grow Arka Rakshak hybrid which is triple resistant to Bilght, wilt and viral leaf curl. Hence Arka Rakshak tomato hybrid (released by IIHR, Hesaraghatta) has recommended for high yield with lower pest and disease incidence were observed.

Technology intervention: Demonstrated package of practices and farmers practice for ICM in Tomato

Sl. No.	Technology intervention	Frontline demonstration (Demonstrated package)	Farmers practice(Local/check)
1	Selection of variety /hybrid	Arka Rakshak – Triple disease resistant hybrid variety, resistance to leaf curling, bacterial wilt and blight disease	Local or unknown private on variety/ hybrid
2	Seed treatment	Seed treated with fungicide Carbendizim	Not known
3	Raising seedlings in nursery	Pro-tray method of raised seedling in 50 % shade net house and covers sides with 50 mesh insect proof nylon net and selected good quality seedling	Purchased seedling from pro-tray method of raised seedling in private shadenet house without nylon mesh and selected unknown poor quality seedling
4	Spacing	90 cm x 45 cm (High plant population per unit area)	120 cm x 45 cm (Low plant population per unit area)

5	Growing trap crops	Transplanting 16:1 ratio of tomato and marigold	Not grown any trap crops
6	Application of FYM (Approximately)	Applied FYM 38 t/ha before 3 week of transplanting	Applied FYM 3 tractor load or 15 t/ha during ridges and furrow preparation (2-3 day before transplanting)
7	Application of recommended dose of fertilizer	250 kg N + 250 kg P2O5 + 250 kg K2O per ha (50 % N + 100 % PK at the time of transplanting and remaining 50 % N applied at 4 week after transplanting)	After transplanting, applied 17:17:17 NPK + 20:20:0 NPK mixed chemical fertilizer (Approx. 10-12 g/plant) 2- 3 times during crop period
8	Application of vegetable special/ micro-nutrient	Foliar spray of vegetable special 75 g + 15 L water + 1 lemon + 1 shampoo (Rs.1)	Not applied any micro-nutrient
9	Irrigation	Drip or furrow method of irrigation at once in a 4-7 days interval depend upon soil condition	Once/twice in a week
10	Weed management	Pre-emergence herbicide Butachlor @1.5 L/ha, followed by hand weeding depend upon weed intensity	Hand weeding 3 to 4 times
11	Training of plants	Stake the plants 30 days after planting with 1.2 – 1.5 m tall stakes. Remove the side branches up to 30 cm from ground level.	Stake the plants at the flowering stage and not removed the side branches up to 30 cm from ground level
12	Plant protection measures for control of insect pest and diseases	Need based application for control: Whitefly, thrips and sucking pest – Spraying with Diamethoate (30 EC) 1.7 ml/L of water. Fruit borer: Spay NPV (250 LE/ha). Control of leaf curling – spraying with imidaclopride 0.3 ml/L of water for vector control. Early blight – spraying of Mancozeb 2g/L of water. Fussarium wilt – Drunching with copper oxy chloride (COC) 3 g/L of water.	Not followed, irrespective of disease and pest used plant protection chemical combined together without compatibility of chemicals and not identified pest and disease for spraying.
13	Harvesting	Manual	Manual

Impact of FLD on Yield of Tomato: The information regarding the impact of FLD on yield has been presented in Table. The data revealed that the yield of tomato per hectare increased by 29.18 percent in FLD plots. This yield is indicates the significant difference in yield before and after conduct of FLD. It means that even after FLD, there was wider adoption of demonstrated technologies.

Table 1 Yield of tomato before and after front line demonstration (FLD)

Average yield of tomato (t/ha)		Percent increase over local
Before FLD (Farmers practice)	FLD plots (Demonstrated production)	Farmers practice
41.67 t/ha	53.83 t/ha	29.18 %

Impact of FLD on Economic of Tomato production: The economic impact of demonstrated tomato production technology was worked out by calculating total cost of cultivation, gross return, net return and B:C Ratio (BCR) of before FLD plot and FLD plot. Total cost of cultivation was calculated by total sum of expenditure of land preparation, seed, manure and fertilizers, plant protection measures, irrigation and labour component. The data presented below mentioned table, revealed that before FLD the yield of tomato was obtained 41.67 t/ha, while yield after FLD the was 53.83 t/ha. The farmers sold tomato at farmer field Rs. 600 per quintal and on this base profitability was calculated

Table 2 Economics of tomato production before and after front line demonstration

Sl. No.	Item	Before FLD	FLD
	Cost of cultivation (Rs/ha)	1,05,400	1,02,500
	Yield of tomato (t/ha)	41.67	53.83
	Gross Return (Rs/ha)	2,50,020	3,22,980
	Net Return (Rs/ha)	1,44,620	2,20,480
	B:C ratio	2.37	3.15

The net returns from tomato before FLD was Rs. 1,44,620 /ha, while the net returns from tomato FLD was Rs. 2,20,480 /ha. The B:C ratio for before FLD was 2.37, which was increased to 3.15 by FLD. It was evident from the results that B:C ratio of tomato FLD was higher than farmer practice. This might be due to higher adoption of total package of practices recommended for tomato crop production by KVK in this region.

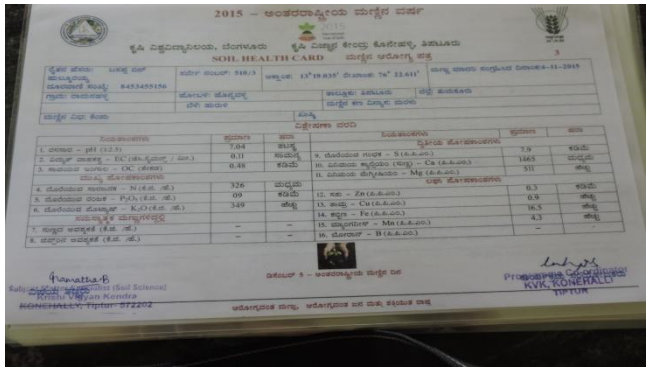
2. Title: Assessment of Soil test based nutrient recommendations adopted by farmers of cluster villages of Tiptur Taluk, Tumkur district

Background: Soil is the basis for food, feed, fuel and fiber production and for services to ecosystems and human well being. It is the reservoir for at least a quarter of global biodiversity and therefore requires the same attention as above ground biodiversity. The International Union of Soil sciences(IUSS) in 2002, made a resolution proposing the 5th December as ‘ world soil day’ to celebrate the importance of soil as a critical importance in our lives. Government of India has also gave more importance to soil and its management and come out with Soil Health Card Mission on 17th February, 2015 to issue Soil Health Cards to all the farmers of the Country to focus on management of soil health.

Technology Intervention: On the Occasion of International soil day on 5th December 2015, KVK has issued 289 Soil Health Cards after analysis of major and micro- nutrients based on the grid of 2.5 ha for irrigated and 10 ha for rainfed areas to S. Ramanahalli, Patrehalli and Lakkihalli villages (Honnavalli Cluster) of Tiptur taluk, Tumkur district. GPS readings and other general details of farmers are collected from each and every farm holdings in that grid area. Soil was analyzed for both major and micro nutrients at KVK Laboratory by using standard procedures. Samples were analyzed for pH, electrical conductivity, organic carbon status, available nitrogen, phosphorous and potash in KVK, Konehalli and secondary & micro nutrients were analyzed at KVK Hirehalli. Soil health cards were issued with soil test based fertilizer recommendations to their proposed crops.

Impact: Before intervention i.e., issuing of soil health cards majority of the farmers in the village are unaware of importance of soil sampling, soil testing and use of soil test based fertilizers to crops. They were blindly applying bags of urea, DAP fertilizers to their crops without knowing the soil health status which lead to increase in cost of cultivation, deterioration of soil health, secondary and micronutrient deficiencies, increased occurrence of pest and diseases, which resulted in decreased crop yield and income of farmers. After the intervention i.e., issuing of soil health cards to farmers and they were trained on use of soil test based fertilizer recommendations, farmers were become aware of importance of using the soil test based fertilizers to their crops which resulted in decrease in nutrient deficiencies in soil, occurrence of pest and diseases, resulted in remarkable decrease in cost of cultivation and increased crop yield and income.

Economic Gains: After adoption of Soil test based fertilizer recommendations, Farmers were experienced decrease in cost of cultivation by 10-15% and increased crop yield by 15-20 %.



3. Title: Community based Monitoring and management of Red palm weevil and Rhinoceros beetle in coconut through pheromone traps

Background --Red palm weevil *Rhynchophorus ferrugineus* and Rhinoceros beetle *Oryctes rhinoceros* are the major pests inflicting severe damage to coconut palms. Due to ineffectiveness of the current management practices to control the two important pests on coconut, a study was conducted to know the attractiveness of red palm weevil and rhinoceros beetle to aggregation pheromone through community approach for monitoring and management to reduce the pest damage in the 12 villages of Tiptur taluk where the pest problem observed.

In order to curtail the outbreak from spreading to neighbouring coconut growing areas and to reduce the pest population in affected villages, Krishi Vigyan Kendra Konehally, Tumkur planned to manage the outbreak with the financial assistance from government of karnataka under Integrated Farming system Demonstration project under RKVY.

Intervention: The pheromone technology for mass trapping of Rhinoceros Beetle (RB) and Red Palm Weevil (RPW) on coconut palms developed by Bio-Control Research Laboratories (BCRL), a division of the Pest Control-India, were used for managing the pest problem. The indigenous technology is low cost and is more effective than chemical pest control methods.

Technology-Sustained mass trapping through community approach over large areas appear to have the potential to bring down the population density of these noxious pests, particularly in parts where per capita land holdings are small.

Pheromone technology demonstrated

Sl. No.	Name of the village	No. Of farmers covered	Coconut Area covered (ha)	Average No. Of Red palm weevil trapped	Average No. Of Rhinoceros beetle trapped
1	Ramanahally	105	42	1365	630
2	Lakkihally	137	55	1644	822
3	Patrehally	110	44	1320	660
4	Mattihally	146	58	1168	438
5	Vittalapura	50	20	600	200
6	Nagatihally	58	23	580	232
7	Bommalapura	101	40	250	150
8	Bagavala	75	30	225	100
9	Margondanahally	64	25	650	180
10	Gudigondanahally	76	30	552	120
11	Bommalpura Gollarahatti	23	10	150	75
	Total	**995**	**322**	**8504**	**3607**

Impact- The pheromone technology studies revealed that mass trapping is more effective when combined with sanitation in coconut farms. RPW is a pest, which affects coconut palms adults of RPW lay eggs in wounds along the trunk, through which they gain entry and feeding by large number of larvae cause the death of trees. It is very difficult for farmers to detect early stages of RPW infestation and they become aware of the problem only when the tree is about to die."

Trapping and destruction of rhinoceros beetle through pheromone traps resulted in the reduction of leaf and spindle damage by 22.5 and 55, respectively. Use of pheromone trap for red palm weevil was found to effectively reduce the palm damage by 65% and 78% dead palms.

The impact of biological control was clearly evident in the pest affected villages after six months. Where on an average 8504 Red palm weevil and 3607 Rhinoceros beetle were trapped and further this pest were destroyed. In the days where hazardous pesticides usage is becoming a matter of concern, this success of biological control as an alternate system, gives impetus to sustainable agriculture.

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4. Title: Processing and Branding of Tamarind Value added products

Background: Smt T.B. Parvatamma w/o Siddaramaiah aged 46 years from Eralager village, Kibbanahalli hobli of Tiptur taluk hails from an agricultural family. Her family owns 5ac area of dry land which is the main source of livelihood. Agricultural income was not stable (Rs 10,000 to Rs 30,000/ annum) and it was not sufficient enough to meet the family needs. Parvatamma is a SHG member of Nandini SHG group of that village. She regularly attends the programmes of women and child welfare department, KVK, agriculture department etc. Once she attended the Training programme organized by KVK, Konehalli for SHG members on value added products from agricultural enterprise and entrepreneurship development programmes. She was very active in training programme on Tamarind and its value added products as she is having 30 tamarind trees, She came forward to do processing and preparation of value added products of tamarind. With this background, KVK Konehalli conducted Front line demonstration on Processing and branding of Tamarind value added products during 2014-15 to enhance the knowledge, skill and income of the farm women.

Technology intervention: Demonstrated on preparation of tamarind slab making, tamarind chigali and toffees along with FSSAI registration, Branding, labeling and packaging.

Training and method demonstration were conducted on preparation of 1 Kg and 1/2 Kg tamarind slabs and value added products like chigali and toffee then her products were registered under FSSAI. Labels were also developed further the demonstration was also given on labeling and packaging.

Economics of Tamarind value added products before and after Front line demonstration

Sl.no	Particulars	Before FLD	After FLD
1	Gross cost (Rs/q)	4.000	4.800
2	Gross returns (Rs/q)	5.000	10.000
3	Net return (Rs/q)	1.000	5.200
4	B:C ratio	1.25	2.08

Impact of FLD on Economics of Tamarind Value added products

The economic impact of Front line demonstration was worked out by calculating gross cost, gross return, net return and B:C ratio before and after Demonstration. Gross cost was calculated by expenditure on processing of tamarind like dehulling and deseeding, slab making, labeling and packaging, labour component. The data collected revealed that net returns before FLD was Rs.1000/q. While the net returns after FLD by registering the product under FSSAI, slab making, labelling and packaging was Rs.5.200/q. The B:C ratio before FLD was 1.25 which was increased to 2.08 after FLD. It was evident from the results of B:C ratio of Tamarind, FLD was higher compare to earlier

After intervention, she started marketing her products in exhibitions and melas. After getting exposure to these exhibitions, she has improvement in her communication, skill and also quality of products and also developed market contacts. Now she is marketing her products in local market, Tiptur and Bangalore shops. Initially Parvathamma's family were giving tamarind trees for lease for Rs 3000/year but after intervention of technology by KVK, they are earning about Rs 50.000 to Rs 75.000 net returns from tamarind trees.

10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

Innovative technologies (or activities) developed by KVK Konehalli, Tumkur and their adoption level

Sl.No.	Crop / Enterprise	Innovative technology / activity	Adoption rate(%)
1	CBA's	a. Redgram & Ragi growers association b. Palm climbers associations	40 50
2	Coconut	Grading and Marketing linkage	25
3	Minor millets	Grading, Branding & Market Linkage	38
4	Soil Fertility management	Soil test based nutrient management in crops	17

Title: Innovative Extension approach through development of Para technicians to solve Coconut production & harvesting problem in the Tumakuru District of Karnataka

Background: Coconut is a predominant plantation crop of the Tumakuru district and comprises around 1.48 lakh ha. With this, recently farmers facing sever labour problem to harvest tender and matured nuts along with the serious pest like Red Palm weevil, Rhinoceros beetle, black headed caterpillar, mites and diseases incidence such as Ganoderma wilt, stem bleeding, Bud rot etc. In view of these, KVK organized vocational training programme.

Interventions:

Process: Capacity building vocational training programme was organized for the 10 young ex trainees of Palm climbing and plant protection vocational training programme from 6 Taluks of Tumakuru district during 2016-17. They were trained rigorously on improved production, integrated nutrient management, Pest & Disease management, Value addition and harvesting of nuts with suitable training module and lesson plan. One week programme was organized for the trainees and majorly focused on Skill development on above practices through method demonstration, class room lecture, interactions and exposure visits. At the last day of training programme the trainees and Horticulture department officials interactions were arranged and they were linked for further utilization of their service to the farming community.

Technology: Improved production, Protection, value addition and climbing in coconut

Impact:

Horizontal Spread: After the training program, each trainees were linked with horticulture department of their respective taluks. Earlier they were more focused only on palm climbing and harvesting of tender and matured nuts but after recent training programmes they focused on plant protection aspects along with harvesting. They were charged fees for their service based on the type of pest and disease problem and their severity. All ten para technicians were involved in plant protection services in coconut. They provided information on installation of pheromone traps to control red palm weevil and rhinocerours beetle in 1500 palms of the district and installed around 150 traps, they suggested around 200 farmers to use *Goniozus nephantidis* to solve the black headed caterpillar problem. Technicians provided the use full information to around 300 farmers on use of Trichoderma & neem cake to manage ganoderma wilt. They also treated around 250 palms which were affected with the ganoderma wilt by using Hexaconozole through root treatment. Around 230 palms were treated with bordeaux paste on trunk of the tree to manage stem bleeding.

Economic gains: Earlier each trainees were earning an average income of Rs. 10,000/ to 15,000/ per month by harvesting of nuts with the skill they gained during previous palm climbing training programme. After the para technicians development training programme each technicians earned an additional income of Rs. 3,000/ to 4,000/ per month.

Employment generation: Out of ten para technicians 3 are fully engaged in palm climbing and plant protection work in coconut. Other 7 are partially involved along with their regular farm activities.

10.E. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Paddy/Ragi	Seedlings were transplanted equi distance at spacing of 22.5 x 22.5cm	It facilitates intercultivation in both directions, conserves moisture, controls weeds and enhance tillering
2	Ragi	Sowing seeds mixed with FYM	It ensures better moisture and nutrient supply and reduces seed rate and finally lesser cost of production
4	Coconut	Application of common salt Planting cactus near tree	Cost effective substitute for potash and also acts as on insect repellent To control stem bleeding
5	Arecanut	Application of Tank silt @ 50ton/ha	Supply nutrient to crop
6	Paddy	Calotropies(yekka) branches are placed at the water inlet	Acts as a insect repellent
7	Coconut	Root feeding with neem oil	Reduce stem bleeding
8	Coconut	Planting kalli plants at the base of coconut palm	Reduce stem bleeding
9	Perennial crops	Rag husk, coconut fronds and husk are used as mulch	Check evaporation and weed growth

10	Redgram	Redgram is mixed with castor oil and stored in earthen vessel	Physical barrier to pests
11	Vegetable garden	Maize is grown around vegetable garden	Physical barrier to cattle and acts as a trap crop for insects

10.F. Indicate the specific training need analysis tools/methodology followed for

- **Identification of courses for farmers/farm women**
  - PRA technique and need analysis through individual & group discussion
  - As per the suggestions of members of SAC
  - Based on discussion at Bimonthly work

- **Rural Youth**
  - Survey & discussion
  - Feedback from bankers

- **Service Personnel**
  - Discussion with District and taluk level officers to know the areas of interest/choice of extension workers based on field problems
  - Deliberations of Bi monthly technical workshop
  - SAC interactions
  - Diagnostic visits

10.G. Field activities

i. Number of villages adopted: 02

ii. No. of farm families selected: 300

iii. No. of survey/PRA conducted : 5

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Good

1. **Year of establishment** :17-12-2005
2. **List of equipments purchased with amount :**

Sl. No.	Equipments / Instruments	Quantity (no.)	Cost (Rs.)
1	pH meter	01	8550
2	Conductivity bridge	01	7400
3	Physical Balance	01	12,000
4	Chemical Balance	01	48,900
5	Magnetic stirrer with Hot Plate	01	5500
6	Shaker with DC Motor	01	27,600
7	Hot Air Oven	01	20,000
8	Water Distillation Still	01	48,850
9	Spectrophotometer	01	46,200
10	Flame Photometer	01	38,720
11	Kjeldahl Digestion and Distillation Setup	01	1,67,709
12	LG Refrigerator with Stabilizer and Stand	01	15,970
13	Kanchan Mixer Grinder	01	1800
14	Pusa Digital STFR meter Kit	01	53,400
15	Digital electrical conductivity meter	01	15,845
TOTAL			**Rs. 518644**
Under the laboratory setup : The following accessories were purchased			
a	Fume cupboard with shutter and blower	1	61,875
b	Laboratory tables: One table with Kadapa stone on top, size-10’ x 3’, One table with wooden top, size-8’ x 3’, One table with plywood top & compartments, size -8’x 3’	3	16,000
c	Showcase boxes	2	11,000
d	61/2’ x 3’ Steel almirahs with glass fitted doors	4	27,450
e	61/2’ x 3’ Steel almirahs without glass fitted doors	4	22,950

f	Office tables Size- 2 1/2’ x 4 1/2’	1	3994
g	Office tables Size- 3’ x 5’	1	4725
h	S - type chairs	5	3263
i	Steel rack	4	5848
j	Stools	5	1500
k	Exhaust fans	2	1688
l	Mesh work for laboratory rooms	---	1775
m	3-phase power connection to fume wood for running the motor (including labour charges)	---	3377
n	40 mm slab for the construction of platform for placing the fume hood (including labour charges)	---	4269
o	Hotplate (rectangular type) - 12’ x 18’	1	10,800
p	Painting materials & labour charges (for painting laboratory & office rooms & wooden almirahs & tables)		3976
q	Extension cords	3	2400
r	Aluminum partition for the Laboratory	1	10,000
TOTAL			**Rs. 1,96,890**
GRAND TOTAL			**Rs. 7,15,534**

B. Under Recurring contingency:

Sl. No.	Particulars	Cost (Rs.)
1	Chemicals	44,695
2	Glassware	1,35,417
3	Petty Items: Gas connection for spectrophotometer with stove and other accessories (1+1), Subble, Pick axe, Mumties, Bondless, Lock Covers, 35 mm locks, Stationeries, Plastic items, Cloth Bags, etc. List of Soil sampling augers and other laboratory accessories purchased: Soil Sampling augers, Standard Test Sieves, Mortar and Pestle, Burette Stand with Clamp, Spatula, Wash Bottles, Agate Mortar and Pestle, Gloves, Paper Tissue Roll, Bunsen Burners, Porcelain Crucible, Funnels, Reagent Bottles, Tongs, Burner Stands, Litmus Papers, pH Papers, Hamato Balance, etc	35,995

4	Soil and plant sample processing and storage facility: Plywood Almirahs with glass doors and compartments, wall box with compartments and front glass door fittings, Laboratory platform partition, Wooden table with compartments and Wooden pestle and mortar.	44,100
GRAND TOTAL		**2,60,207**

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samplesanalyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	7062	6627	1891	337750
Water Samples	5904	5712	1837	528680
Plant samples	-	-	-	-
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	**12966**	**12339**	**3728**	**866430**

Details of samples analyzed during the 2016-17:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1019	992	612	**49050**
Water Samples	961	959	621	**58260**
Plant samples	-	-	-	-
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	**1980**	**1951**	**1233**	**107310**

10.I. Technology Week celebrationduring 2016-17 Yes/No, If Yes : Yes

Period of observing Technology Week: 23rd– 30th December 2016

Total number of farmers visited :836

Total number of agencies involved : 4

Number of demonstrations visited by the farmers within KVK campus: 12

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-	-	On important crops of Tumkur district and important animal husbandry practices
Lectures organized	8	506	
Exhibition	1	890	
Film show	7	506	
Fair	-	-	
Farm Visit	5	506	
Diagnostic Practical's	-	-	
Supply of Literature (No.)	-	-	
Supply of Seed (q)	-	-	
Supply of Planting materials (No.)	-	-	
Bio Product supply (Kg)	-	-	
Bio Fertilizers (q)	-	-	
Supply of fingerlings	-	-	
Supply of Livestock specimen (No.)	-	-	
Total number of farmers visited the technology week	21	890	

10. J. Interventions on drought mitigation (if the KVK included in this special programme) : No

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
-	-	-	-

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	-	-
Pulses	-	-
Cereals	-	-
Vegetable crops	-	-
Tuber crops	-	-
Total	**-**	**-**

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
-	-	-	-
-	-	-	-
Total	-	-	-

D. Animal health camps organized

State	Number of camps	No.of animals	No.of farmers
-	-	-	-
-	-	-	-
-	-	-	-

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
-	-	-	-	-
-	-	-	-	-

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
-	-	-	-
-	-	-	-
-	-	-	-

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-				-			
Total	-	-	-	-	-				-			

PART XI. IMPACT

11. A. Impact of KVK activities (Not to be restricted for reporting period).

Technologies (or activities) promoted by KVK Konehalli, Tumkur and their adoption level

Sl.No.	Crop / Enterprise	Innovative technology / activity	Adoption rate (%)
1	Agriculture & horticulture crops	Promotion of varieties/hybrids to increase productivity and disease/pest resistance/tolerance	18
2	Minor millets	Promotion of improved varieties Sukshema & OLM-203 in Little millet, SIA 326 & HMT 100-1 in Foxtail millet and PSC-1 & RBK -11 in Kodomillet and seed production	25
3	Seed production a. Ragi b. Red gram c. Saame d. Navane	Quality seed production	20
4	Intercropping	Promoting redgram intercropping in ragi, groundnut, greengram and sesamum and pulses intercropping in coconut/arecanut/mango orchards	17
5	Fodder museum	Instructional unit of fodder crops	25-30
6	Palm climbing	Self-employment generation	50-60
7	Coconut	Mass trapping of rhinoceros beetle & Red palm weevil through pheromone traps	65
8	Coconut	Enrichment of compost/ FYM with Trichoderma for managing Ganoderma wilt	45
9	Mango	Fruit fly Pheromone traps	35
10	Fodder crops	Popularization of CoFS -29	30
11	Livestock	Use of mineral mixture to increase milk yield & milk quality	35

12	CBA's	a. Redgram & Ragi growers association b. Palm climbers associations	40 40
13	Coconut	Grading and Marketing linkage	35-40
14	Minor millets	Grading, Branding & Market Linkage	35-40
15	Soil Fertility management	Soil test based nutrient management in crops	30
16	Paddy	Blast and sheath tolerance management in paddy	30
17	Castor	Caterpillar management	25
18	Rainwater harvesting	Rainwater harvesting through soil and water conservation	35
19	Pest and disease forecasting	Blast incidence in paddy, BHC in Coconut and podborer in redgram	12
20	IFS	Promotion of Integrated farming system	10

11.B. Cases of large scale adoption

1. Title: Assessment of Soil test based nutrient recommendations adopted by farmers of cluster villages of Tiptur Taluk, Tumkur district

Background: Soil is the basis for food, feed, fuel and fibre production and for services to ecosystems and human well being. It is the reservoir for at least a quarter of global biodiversity and therefore requires the same attention as above ground biodiversity. The International Union of Soil sciences(IUSS) in 2002, made a resolution proposing the 5th December as ' world soil day' to celebrate the importance of soil as a critical importance in our lives. Government of India has also gave more importance to soil and its management and come out with Soil Health Card Mission on 17th February, 2015 to issue Soil Health Cards to all the farmers of the Country to focus on management of soil health.

Technology Intervention: On the Occasion of International soil day on 5th December 2015, KVK has issued 289 Soil Health Cards after analysis of major and micro- nutrients based on the grid of 2.5 ha for irrigated and 10 ha for rainfed areas to S. Ramanahalli, Patrehalli and Lakkihalli villages (Honnavalli Cluster) of Tiptur taluk, Tumkur district. GPS readings and other general details of farmers are collected from each and every farm holdings in that grid area. Soil was analyzed for both major and micro nutrients at KVK Laboratory by using standard procedures. Samples were analyzed for pH, electrical conductivity, organic carbon status, available nitrogen, phosphorous and potash in KVK, Konehalli and secondary & micro nutrients were analyzed at KVK Hirehalli. Soil health cards were issued with soil test based fertilizer recommendations to their proposed crops.

Impact: Before intervention i.e., issuing of soil health cards majority of the farmers in the village are unaware of importance of soil sampling, soil testing and use of soil test based fertilizers to crops. They were blindly applying bags of urea, DAP fertilizers to their crops without knowing the soil health status which lead to increase in cost of cultivation, deterioration of soil health, secondary and micronutrient deficiencies, increased occurrence of pest and diseases, which resulted in decreased crop yield and income of farmers. After the intervention i.e., issuing of soil health cards to farmers and they were trained on use of soil test based fertilizer recommendations, farmers were become aware of importance of using the soil test based fertilizers to their crops which resulted in decrease in nutrient deficiencies in soil, occurrence of pest and diseases, resulted in remarkable decrease in cost of cultivation and increased crop yield and income.

Economic Gains: After adoption of Soil test based fertilizer recommendations, Farmers were experienced decrease in cost of cultivation by 10-15% and increased crop yield by 15-20 %.

2. Title: Community based Monitoring and management of Red palm weevil and Rhinoceros beetle in coconut through pheromone traps

Background --Red palm weevil *Rhynchophorus ferrugineus* and Rhinoceros beetle *Oryctes rhinoceros* are the major pests inflicting severe damage to coconut palms. Due to ineffectiveness of the current management practices to control the two important pests on coconut, a study was conducted to know the attractiveness of red palm weevil and rhinoceros beetle to aggregation pheromone through community approach for monitoring and management to reduce the pest damage in the 12 villages of Tiptur taluk where the pest problem observed.

. In order to curtail the outbreak from spreading to neighbouring coconut growing areas and to reduce the pest population in affected villages, Krishi Vigyan Kendra Konehally, Tumkur planned to manage the outbreak with the financial assistance from government of karnataka under Integrated Farming system Demonstration project under RKVY.

Intervention:

The pheromone technology for mass trapping of Rhinoceros Beetle (RB) and Red Palm Weevil (RPW) on coconut palms developed by Bio-Control Research Laboratories (BCRL), a division of the Pest Control-India, were used for managing the pest problem. The indigenous technology is low cost and is more effective than chemical pest control methods.

Technology-Sustained mass trapping through community approach over large areas appear to have the potential to bring down the population density of these noxious pests, particularly in parts where per capita land holdings are small.

Pheromone technology demonstrated

Sl. No.	Name of the village	No. Of farmers covered	Coconut Area covered (ha)	Average No. Of Red palm weevil trapped	Average No. Of Rhinoceros beetle trapped
1	Ramanahally	105	42	1365	630
2	Lakkihally	137	55	1644	822
3	Patrehally	110	44	1320	660
4	Mattihally	146	58	1168	438
5	Vittalapura	50	20	600	200
6	Nagatihally	58	23	580	232
7	Bommalapura	101	40	250	150
8	Bagavala	75	30	225	100
9	Margondanahally	64	25	650	180
10	Gudigondanahally	76	30	552	120
11	Bommalpura Gollarahatti	23	10	150	75
	Total	**995**	**322**	**8504**	**3607**

Impact- The pheromone technology studies revealed that mass trapping is more effective when combined with sanitation in coconut farms. RPW is a pest, which affects coconut palms adults of RPW lay eggs in wounds along the trunk, through which they gain entry and feeding by large number of larvae cause the death of trees. It is very difficult for farmers to detect early stages of RPW infestation and they become aware of the problem only when the tree is about to die."

Trapping and destruction of rhinoceros beetle through pheromone traps resulted in the reduction of leaf and spindle damage by 22.5 and 55, respectively. Use of pheromone trap for red palm weevil was found to effectively reduce the palm damage by 65% and 78% dead palms.

The impact of biological control was clearly evident in the pest affected villages after six months. Where on an average 8504 Red palm weevil and 3607 Rhinoceros beetle were trapped and further this pest were destroyed. In the days where hazardous pesticides usage is becoming a matter of concern, this success of biological control as an alternate system, gives impetus to sustainable agriculture.

11. C. Details of impact analysis of KVK activities carried out during the reporting period

Title: Innovative Extension approach through development of Para technicians to solve Coconut production & harvesting problem in the Tumakuru District of Karnataka

Background: Coconut is a predominant plantation crop of the Tumakuru district and comprises around 1.48 lakh ha. With this, recently farmers facing sever labour problem to harvest tender and matured nuts along with the serious pest like Red Palm weevil, Rhinoceros beetle, black headed caterpillar, mites and diseases incidence such as Ganoderma wilt, stem bleeding, Bud rot etc. In view of these, KVK organized vocational training programme.

Interventions:

Process: Capacity building vocational training programme was organized for the 10 young ex trainees of Palm climbing and plant protection vocational training programme from 6 Taluks of Tumakuru district during 2016-17. They were trained rigorously on improved production, integrated nutrient management, Pest & Disease management, Value addition and harvesting of nuts with suitable training module and lesson plan. One week programme was organized for the trainees and majorly focused on Skill development on above practices through method demonstration, class room lecture, interactions and exposure visits. At the last day of training programme the trainees and Horticulture department officials interactions were arranged and they were linked for further utilization of their service to the farming community.

Technology: Improved production, Protection, value addition and climbing in coconut

Impact:

Horizontal Spread: After the training program, each trainees were linked with horticulture department of their respective taluks. Earlier they were more focused only on palm climbing and harvesting of tender and matured nuts but after recent training programmes they focused on plant protection aspects along with harvesting. They were charged fees for their service based on the type of pest and disease problem and their severity. All ten para technicians

were involved in plant protection services in coconut. They provided information on installation of pheromone traps to control red palm weevil and rhinocerours beetle in 1500 palms of the district and installed around 150 traps, they suggested around 200 farmers to use *Goniozus nephantidis* to solve the black headed caterpillar problem. Technicians provided the use full information to around 300 farmers on use of Trichoderma & neem cake to manage ganoderma wilt. They also treated around 250 palms which were affected with the ganoderma wilt by using Hexaconozole through root treatment. Around 230 palms were treated with bordeaux paste on trunk of the tree to manage stem bleeding.

Economic gains: Earlier each trainees were earning an average income of Rs. 10,000/ to 15,000/ per month by harvesting of nuts with the skill they gained during previous palm climbing training programme. After the para technicians development training programme each technicians earned an additional income of Rs. 3,000/ to 4,000/ per month.

Employment generation: Out of ten para technicians 3 are fully engaged in palm climbing and plant protection work in coconut. Other 7 are partially involved along with their regular farm activities.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
State Department of Agriculture, Tumakuru Dist.	Conducting training programmes, Frontline Demonstrations, On Farm Testing and field days
State Department of Horticulture, Tumakuru Dist.	Conducting training programmes, FLD's field visit
State Department of Animal Husbandry & Veterinary Services, Tumakuru	Conducting Animal Health Camps, Training for Veterinary Officers & farmers
Department of Women & Child Welfare, Tumakuru Dist.	Joint diagnostic survey, Conducting training to women Self Help Groups organizing programmes like nutrition week,world food day etc.
Department of Microbiology, UAS, Bangalore	Supplied Rhizobium, PSB, Azospirillum for FLD's and OFT's
Taluk Agricultural Produce Co-operative Marketing Society (TAPCMS), Tiptur, Arsikere.	Supplied Fertilizers, Gypsum, Neem Cake chemicals for FLD's and OFT's
General Hospital, Tiptur	Training for Womens, Child Health campaign
Gram Panchayats	Conducting training programmes to the farmers/farm women

Department of Watershed, Tumakuru	Conducting training programmes to the Department officials, NGO's and farmers and financial aid for conducting training programmes
IIHR, Hesaraghatta, Bangalore	Technical information and critical inputs for FLD's and OFT's Demonstrations and trainings
Zuari Industries Ltd. Tumakuru	Conducting training and demonstration
ORDER, NGO, Tumakuru	

12.B. List Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies :

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
Doubling of farmers income	Implementing Centre	December 2017	KAPC, GOK	15,00,000

12.C. Details of linkage with ATMA :

a) Is ATMA implemented in your district Yes/No : Yes

If yes, role of KVK in preparation of SREP of the district? : Technical guidance was provided in preparation of SREP. Now, KVK staff are involved in revisiting of SREP programme under ATMA

Experience sharing under ATMA scheme

Sl.No.	Particulars	Number
1	Demonstrations conducted	5
2	As Resource persons in demonstrations	8
3	As Resource persons in training programmes	5
4	Farm schools	1
5	Field visits	9
6	Meetings attended	4
7	Research projects (with titles) – Management of Red palm weevil & Rhinocerus beetle in coconut	1
8	Development of SREP	1
a.	Farmers – Scientists Interaction	3
b.	Collaborative programme	6

Coordination activities between KVK and ATMA during 2016-17

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	-	4	-	-
02	Research projects	1	-	-	Management of Red palm weevil & Rhinocerus beetle in coconut
03	Training programmes		5	5	
04	Demonstrations	-	10	10	-
05	Extension Programmes	-	-	-	-
	Kisan Mela	-	-	-	-
	Technology Week	1	-	-	-
	Exposure visit	2	-	-	-
	Exhibition	-	-	-	-
	Soil health camps	2	-	-	-
	Animal Health Campaigns	1	-	-	-
	Others (Pl. specify) field days	-	-	-	-
06	Publications	-	-	-	-
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	5	-	-	-

12.D. Give details of programmes implemented under National Horticultural Mission : Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
-	-	-	-	-	-

12.E. Nature of linkage with National Fisheries Development Board : Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
-	-	-	-	-	-

12.F. Details of linkage with RKVY : Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
-	-	-	-	-	-

12. GKisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2016	3	4294	-
May 2016	3	4294	-
June 2016	6	4294	-
July 2016	7	4294	-
August 2016	2	4300	-
September 2016	4	4300	-
October 2016	4	4300	-
November 2016	3	4300	-
December 2016	3	4300	-
January 2017	3	4680	-
February 2017	3	4680	-
March 2017	2	4680	-
Total for the year 2016-17	**43**	-	-

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

13.A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Model horticulture nursery	2010-11	0.09	IIHR / UAS (B) / Private	Production of good quality planting material / seedlings of horticulture crops	Chilli (Arka Meghana, Ulka) 18,500 Tomato (Arka Rakshaka, Alankar) 23,000 Brinjal (Arka Anand) 4,800 Drumstick (Bhagya) 1,500 Papaya (Arka Prabhath, Red lady) 1,250	30,500	52500	-
Total								**52500**	

13.B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty. (Kgs)	Cost of inputs	Gross income	
Cereals & millets									
Finger millet	24.07.2016	Crop failure	2	MR – 6	Seeds	-	-	-	-
Little millet	23.08.2016	Crop failure	3	SIA – 326	Seeds	-	-	-	-
Foxtail millet (Saame)	24.08.2016	Crop failure	4	OLM – 203	Seeds	-	-	-	-
Pulses									
Redgram	13.06.2016	15.11.2016	2	BRG –2	Seeds	100	3500	6000	-
Oilseeds									
Castor	21.07.2016	26.11.2016	1	DCH-177	Seeds	80	3000	4800	-
Fibers	-	-	-	-	-	-	-	-	-
Spices & Plantation crops	-	-	-	-	-	-	-	-	-
Floriculture	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-
Mango	-	26.03.2017	2.4	Mallika, Raspuru, Malgova, Badam	Fruit	-	6000	96000	-
Tamarind	-	17.01.2017	0.8	-	Fruit	-	-	20615	-
guava	-	25.08.2016	0.8	-	Fruit	-	-	23600	-
sapota	-	-	2.4	Cricket ball	Fruit	-	-	4000	-

13.C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,) : Nil

Sl. No.	Name of the product	Qty	Amount (rs.)		Remarks
			Cost of inputs	Gross income	
-	-	-	-	-	-

13.d. Performance of instructional farm (livestock and fisheries production) :

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	HF Cross (Milch animal)	-	Milk	324 ltr	3100	7932	-
2	HF(Milch animal)	-	Milk	745 ltr	6300	15235	-

3	HF Cross(Calf female)	-	-	1	-	-	-
4	Jessy(Calf) Cross	-	-	1	-	-	-
5	Jessy Cross	-	-	1	-	-	-
6	Jessy calf female	-	-	1	-	-	-
7	Amrith Mahal (Drought cum Milch)	-	-	2	-	-	-
8	Amrith Mahal Calf male	-	-	1	-	-	-
9	Amrith Mahal Calf male	-	-	1	-	-	-
10	Amrith Mahal Calf female	-	-	1	-	-	-
11	Sheep male	-	-	4	-	-	-
12	Female	-	-	8	-	-	-

13.E. Utilization of hostel facilities

Accommodation available (No. of beds): 30

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2016	62	10	-
May 2016	57	11	-
June 2016	96	16	-
July 2016	40	1	-
August 2016	-	-	-
September 2016	-	-	-
October 2016	25	6	-
November 2016	12	6	-
December 2016	10	6	-
January 2017	-	-	-
February 2017	-	-	-
March 2017	-	-	-

13.F. Database management

S.No	Database target	Database created
1	OFT, FLD	Created
2	Soil Testing results database	Created
3	KMAS message service Database	Created
4	Weather database	Created

13.G. Details on Rain Water Harvesting Structure and micro-irrigation system :Nil

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
-	-	-	-	-	-	-	-	-	-

PART XIV –FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute (ICAR)	Canara Bank	Tiptur	699	SB	0699101022252	572015202	CNRB0000699
With KVK (Revolving fund)	Canara Bank	Tiptur	699	SB	0699101025795	572015202	CNRB0000699

14.B. Utilization of KVK funds during the year 2016-17(Rs. In lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	7350000	7350000	6950000
2	**Traveling allowances**	150000	150000	150000
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance	275000	275000	274980
B	POL, repair of vehicles, tractor and equipments	175000	175000	174983
C	Meals/refreshment for trainees	80000	80000	79982
D	Training material	50000	50000	50000
E	Frontline demonstration except oilseeds and pulses	240000	240000	237207
F	On farm testing	64000	64000	63788
G	Training of extension functionaries	25000	25000	25000
H	Extension activities	50000	50000	49553
J	Maintenance of buildings	50000	50000	49979
K	Library	7000	7000	6925
L	Farmers' Field School	30000	30000	27000
M	EDP/Innovation Activities	30000	30000	29080
N	Soil & water testing	50000	50000	49969
O	Display Boards	10000	10000	10000

S. No.	Particulars	Sanctioned	Released	Expenditure
P	Integrated Farming System	30000	30000	29420
24.2.2	**Equipments & Furniture** *a) Equipment & Furniture* *Office automation)*	300000	300000	300000
	b) Furniture	100000	100000	100000
24.2.3	**Vehicle** *4 wheeler (Replacement)*	800000	800000	800000
24.4	**GRAND TOTAL**	**9866000**	**9866000**	**9457866**

14.C. Status of revolving fund (Rs. In lakh) for the three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2014 to March 2015	8,15,143	6,25,861	6,88,294	7,21,978
April 2015 to March 2016	7,21,978	9,11,191	801438	831732
April 2016 to March 2017	831732	907905	670171	1069466

15. Details of HRD activities attended by KVK staff during 2016-17

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. T.S. Sukanya	Programme co-ordinator	National conference on pulses	UAS, Bengaluru	2 days (21 -22 / 05 /2016)
Dr. T.S. Sukanya	Programme co-ordinator	II KVK symposium	TNAU	2 days (7th & 8th March 24, 2017)
Dr. Mamatha. B.	Subject Matter Specialist (SS &AC)	Conservation agriculture and farm mechanization for sustainable intensification in Karnataka	UAS, Dharwad	2 days
Mrs. Roopa B Patil	Subject Matter Specialist (HSc)	winter school on smart functional textile apparel to combat extremities : A futuristic approach	AICRP on Home science (clothing and textiles) UAS, Dharwad	21 days
Dr. K.R. Shreenivasa	Subject Matter Specialist (PP)	National conference on pulses	UAS, Bengaluru	2 days (21 -22 / 05 /2016)
Dr. K.R. Shreenivasa	Subject Matter Specialist (PP)	II KVK symposium	TNAU	2 days (7th & 8th March 24, 2017)
Dr. Mamatha. B.	Subject Matter Specialist (SS &AC)	Personality development	UAS, Bangalore	03 days
Dr. Shankara M H	Subject Matter Specialist (Ag. Extn.)	Skill development in agriculture	MANAGE, Hyderabad	01 day

16. Please include any other important and relevant information which has not been reflected above

Farmers Field School organized: Clean milk production

Sl. No.	Type of activities	Date	No. of participants
1	Preliminary meeting	25.11.2016	40
2	Importance of clean milk production – sensitization	02.12.2016	25
3	Hygienic practices involved in milk production	09.12.2016	25
4	Importance of mastitis in clean milk production	16.12.2016	25
5	Methods of milking	23.12.2016	25
6	Animal Health camp	25.12.2016	43
7	Importance of Mineral Mixture	06/01/2017	25
8	Importance of Deworming	13/01/2017	25
9	Maintenance of Pregnant Cow	20/01/2017	25

Results

Sl. No.	Parameters	Check	Demo
1	Quality of milk (Fat %) – lactometer reading	22	31
2	Milk yield	6 ltr's	8.2 ltrs
3	Prevalence of mastitis	80%	35%

Distance education

Sl. No.	Course	Date	Duration (days)	No. of participants
1	One year diploma in Agriculture course under Distance education (First Semester, Classes)	22-08-2016 to 27-08-2016	06	15
	(First Semester, Eamination)	19-09-2016 to 24-09-2016	06	15
	One year diploma in Agriculture course under Distance education (Second Semester, Classes)	31-01-2017 to 04-02-2017	06	15
	(Second Semester, Examination)	27-02-2017 to 04-03-2017	06	15
2	Certificate course on post harvest technology in agriculture, fruits and vegetable crops (contact classs)	17-10-2016 to 22-10-2016	06	10
	Certificate course on post harvest technology in agriculture, fruits and vegetable crops (Examination)	22-10-2016	01	10

DAESI Programme: KVK is conducting diploma for 30 input dealers of Tumkur district from March 2017

Farmers to farmers training (Sponsored by GOK)

Sl. No.	Course	Date	Duration	No. of participants
1	Farmers to farmers training	14-02-2017 to 16-02-2017	3	30

Programme Co-ordinator

OFT

		
Assessment of commercial flower crops in coconut based cropping system	**Performance of Chikpea varieties in Tumakur district**	**Performance of different weeding tools for drudgery reduction**
		
Performance of different weeding tools for drudgery reduction	**Assessment of nutrient requirement in Little Millet**	**Efficacy of different education methods to mothers of Anganawadi children to prevent malnutrition**

Front line demonstration

		
Technology Capsules for Sustainable Production in Coconut	**Integrated nutrient management in Paddy**	**Integrated Crop Management in Chilli**
		
Integrated pest management in Paddy	**Branding and market linkages to Finger millet value added products**	**Promotion of Fodder bank for regular green fodder availability**

Training programme

		
On campus training	**On campus training**	**On campus training**
		
On campus training	**On campus training for farm women**	**Off campus training**

Special programme

		
National nutrition week	**Rabi Campaign**	**Swachta pakwada**
		
Parthenium awareness week	**World Breast feeding day**	**World Environmental day**

Field visits

		
Coconut field visit	**Coconut field visit**	**Brinjal field visit**
		
Ragi field visit	**Ragi field visit**	**Banana field visit**

Other extension activities

		
Animal Health camps	**Exhibitions**	**Method demonstrations**
		
Animal Health camps	**Field days**	**Field days**