#### KRISHI VIGYAN KENDRA, TUMAKURU I

# **ANNUAL REPORT for 2018-19**

(FOR THE PERIOD FROM 01 APRIL 2018 TO 31 MARCH 2019)

# UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE ICAR-KRISHI VIGYAN KENDRA, TUMAKURU

## PART I - GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Wah Addrass	
KVK Address	Office	Fax	E mail	Web Address	
KVK, Konehalli, Tiptur, Tumakuru	08134-298955		kvktumkur@gmail.com, kvk.Tumakuru1@icar.gov.in	www.kvktumkur.org	

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

Telephone		E mail	Web Address	
Office	Fax	E man	Web Address	
080-23332442 09449866900	080-23332442	vc@uasbangalore.edu.in	www.uasbangalore.edu.in	
	Office	Office         Fax           080-23332442         080-23332442	Office         Fax         E mail           080-23332442         080-23332442         yc@uashangalore.edu.in	

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

Name	Telephone / Contact					
	Residence	Mobile	Email			
Dr. Govinda Gowda V.		9449866936	kvktumkur@gmail.com			

#### 1.4. Year of sanction: 2004

#### 1.5. Staff position as on 31 March 2019

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Sl. No.	Sanctioned post	Name of the incumbent	Designation	M /F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Head/Senior Scientist	Dr. Govinda Gowda V.	Senior Scientist& Head	M	Agril. Extn.	M.Sc (Agri.), Ph.D.	37400- 67000	38800 + 9000 AGP	30-01-2018	Permanent	OBC
2	Scientist/SMS	Dr. K.R. Shreenivasa	Scientist	M	Plant Protection	M.Sc (Agri.), Ph.D.	15600- 39100	23230 + 7000 AGP	17-07-2009	Permanent	OBC
3	Scientist/SMS	Dr. Nagappa Desai	Scientist	М	Horticulture	M.Sc. (Agri.) in Horticulture, Ph.D.	15600- 39100	23190 + 7000 AGP	17-07-2009	Permanent	Others
4	Scientist/SMS	Mr. M.H. Shankara	Scientist	M	Agril. Extn	M.Sc (Agri.), PGDAEM, PGDMCJ, PGDMM	15600- 39100	21450 + 7000 AGP	26-10-2011	Permanent	OBC

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M /F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
5	Scientist/SMS	Dr. H.B. Shivappa Nayaka	Scientist	M	Animal Science	M.V.Sc. (Poultry Science)	15600- 39100	19050 + 6000 AGP	24-10-2013	Permanent	ST
6	Scientist/SMS	Dr. Anitha M S	Scientist	F	Soil Science	M.Sc. (Agri.) in SS&AC, Ph.D.	15600- 39100	16250 + 6000 AGP	31-01-2018	Permanent	OBC
7	Scientist/SMS	Dr. Sneha Sigihalli	Scientist	F	Home Science	M.Sc (Food Science & Nutrition), Ph.D.	-	36000 consolidat ed	02-11-2018	Temporary	OBC
8	Programme Assistant (Lab Tech.)	Mrs. Arjuman Banu	Programme Assistant (Lab Tech.)	F	-	B.Sc. (Agri.), MBA (ABM)	9300- 34800	11470 + 4200 AGP	10-12-2013	Permanent	Others
9	Programme Assistant (Computer)	Mr. Pradeep Kumar. H	Programme Assistant (Computer)	M	-	BE (CSE), MCA	9300- 34800	13500 + 4600 AGP	22-01-2011	Permanent	SC
10	Programme Assistant/ Farm Manager	Ms. Savithra	Programme Assistant/ Farm Manager	F	-	B.Sc. (Agri.)	-	18000cons olidated	25-07-2015	Temporary	SC
11	Assistant	Mr. Santhosh Kumar M.P.		M	-	B Com	-	16000 consolidat ed	01-06-2018	Temporary	Others
12	Jr. Stenographer	Ms. Amrutha	-	F	-	BA	-	12500 consolidat ed	01-02-2019	Temporary	Others
13	Driver - 1	Mr. B. Mallikarjunaiah	-	M	-	SSLC	14550- 26700	33450	18-02-2010	Permanent	Others
14	Driver - 2	Mr. Harish B N	-	M	-	SSLC	-	11600	09-06-2017	Temporary	Others
15	SS-1	Mr. L. Manjaiah	-	M	-	SSLC	10400- 16400	22950	20-10-2008	Permanent	SC
16	SS-2	Mr. Rudresha	-	M	-	SSLC	-	9300	03-03-2018	Temporary	Others

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

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

## 1.7. Infrastructural Development:

#### A) Buildings

			Stage							
S.	NI	Source of		Complete			Incomple	te		
No.	Name of building	funding	Completion	Plinth area	Ermanditura (Da )	644 D-4-	Plinth area	Status of		
			Date	(Sq.m)	Expenditure (Rs.)	Starting Date	(Sq.m)	construction		
1.	Administrative	ICAR UAS	22.02.2012		55,00,000					
	Building	ling	22.02.2012	_	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	2017	666162	48000	Working
Tractor Massey Ferguson	2002	3,80,000	4292.2	Working
BikeTVS Star City (ICAR, 79 / III)	2006	40,000	47050	Working
Honda Activa (ICAR, 7 / IV)	2009	50,000	50025	Working

#### 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
47	Epson L655 printer	02-11-2017	29568	Good
48	Dell incpim intel core	07-11-2017	50600	Good
49	4TB segate external hard disc	07-11-2017	11800	Good
50	Electronic balance	13-11-2017	46080	Good
51	Digital conductivity meter	18-12-2017	23600	Good

52	Aluminium sliding window	13-12-2017	16042	Good
53	pH meter electrode system	21-12-2017	33276	Good
54	Dell laptop intercore	06-03-2018	49000	Good

# 1.8. Details of SAC meeting conducted during 2018-19

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
06.03.2019	40	Arrange for sale of minor millet seeds through KVK, sales counter for benefit of farmers.	Suggestions are	-
		Create awareness among farmers regarding cultivation of flower crops like marigold,	included in the	
		Chrysanthemum as intercrops in coconut	action plan	
		Educate farmers regarding Nari Suvarna breed and silage making.	2019-20	
		Educate farmers regarding crops suitable for drought and water management through		
		training		
		Conduct method demonstration on seeds treatment		
		Organize trainings on value addition in coconut, Mushroom, cashew & bi products		
		Create awareness among farmers regarding DSR paddy cultivation		
		Utilize progressive farmers as resource persons and upload their success stories on ICAR		
		website		
		Conduct campaign to manage coconut white flies		
		Create awareness among farmers regarding importance of micro nutrients		
		Conduct training on mulberry cultivation		
		Organize trainings on importance of Agro forestry		
		Initiate action to increase organic carbon content of KVK farm		
		Create awareness on mechanization and organize trainings		

## **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
	Central DryZone (Zone - 4)	Red sandy soil mixed with clay soil and patches of black soil
1	Madhugiri, Pavagada, Sira, Koratagere, Tiptur and C.N.	Average rain fall 606.81 mm
	Halli taluks	Source of irrigation are small tanks &borewells
	Eastern DryZone (Zone -5)	Red clay loam and clay lateritic soil
2	Tumakuru and Gubbi taluk	Average rainfall 768.16 mm
	Tulliakuru alid Gubbi taluk	Source of irrigation are tanks, wells and borewells
	Couthour Duy Zono (Zono 6)	Red sandy soil mixed with clay soil.
3	Southern DryZone (Zone-6)  Kunigal and Turvakara taluk	Average rainfall 750.56
	Kunigal and Turvekere taluk	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 (tons)	Productivity (q/ha)	Potential yield (q/ha)	Yield gap (q/ha)
1	Paddy	34,471	25,829	38	55	17
2	Finger millet	1,49,734	2,51,525	15.5	25	9.5
3	Minor millets	3,303	4,128	8.5	12	3.5
4	Red gram	16,796	4128	12	16	4
5	Horse gram	11,460	5180	5.5	10	4.5
6	Black gram	604	193	3.2	7.5	4.3
7	Green gram	13,377	4348	5.5	7.5	2
8	Cow pea	4,495	1686	6.5	10	3.5
9	Field bean	8,009	2523	26	38	12
10	Groundnut	65,187	42567	6.5	25	18.5
11	Sesamum	662	119	3.5	5	1.5
12	Castor	1,838	783	8.5	12	3.5
13	Coconut	1,19,616	12,377 (Lakhs)	60 (No/palm)	110 (No/palm)	50 (No/palm)
14	Arecanut	32,341	43,691	11	15	4
15	Mango	15,152	151,520	100	120	20
16	Banana	5,174	127346	246	300	54
17	Tomato	1,735	92,923	530	750	220
18	Brinjal	354	11,371	121.2	160	38.8
19	Chilli	2,250	13,204	293	400	107
20	Tamarind	2,556	15,159	60	100	40

(Source: Dept. of Agriculture, Tumakuru)

Sl. No.	Стор	Area (ha)	Production in M.Tons	Yield in Tons/Hectare	Value in Rs. Lakhs		
	I. Fruit Crops						
1.	Mango	11929	229207	19.21	22921		
2.	Banana(Total)	4904	140178	28.58	12632		
a.	Cavandish	980	34702	35.41	2084		
b.	Other Varieties	3924	105476	26.88	10548		
3.	Total Citrus Varieties	227	4415	19.45	697		
a.	Lemon	47	1211	25.77	121		
b.	Orange	2	50	25.00	9		

Sl. No.	Crop	Area (ha)	Production in M.Tons	Yield in Tons/Hectare	Value in Rs. Lakhs
	Gourd Varieties	178	3154	17.72	567
c. 4.	Guava	185	5017	27.12	1002
	Sapota	738	10283	13.93	1542
	Pomegranate	1369	11327	8.27	3173
	Jack	146	5876	40.25	940
	Papaya	180	13764	76.47	3718
	Grapes	10	161	16.10	32
	Fig	8	96	12.00	29
10.	1.6		Vegetable Crops	12.00	
11.	Potato (Total)	28	654	23.36	62
	Kharif	9	154	17.11	15
a.	Tildi II			17.11	13
b.	Rabi	7	140	20.00	11
	Summer	12	360	30.00	36
	Tomato (Total)	632	22806	36.09	2576
a.	Kharif	374	8027	21.46	802
	Rabi	154	8620	55.97	1034
	Summer	104	6159	59.22	740
c. 13.	Brinjal	312	10900	34.94	981
	Beans	191	2173	11.38	334
	Onion (Total)	414	7938	19.17	1182
	Kharif	385	7335	19.05	1100
a. b.	Rabi	15	312	20.80	47
	Summer	14	291	20.79	35
	Green Chillies	962	13795	14.34	828
17.	Tapioca	6	86	14.33	5
18.	Sweet Potato	16	240	15.00	17

Sl. No.	Crop	Area (ha)	Production in M.Tons	Yield in Tons/Hectare	Value in Rs. Lakhs
19.	Khol Varieties (Total)	64	1344	21.00	84
a.	Cabbage	11	292	26.55	11
b.	Knol-Khol	49	980	20.00	69
c.	Cauliflower	4	72	18.00	4
20.	Peas	5	90	18.00	18
21.	Lady's Finger	31	290	9.35	37
22.	Radish	26	363	13.96	23
23.	Beet Root	2	38	19.00	4
24.	Carrot	54	1067	19.76	117
25.	Capsicum	8	112	14.00	13
26.	Drumstick (in lakh sticks)	4	8	2.00	2
27.	Watermelon	460	19635	42.68	1080
28.	Muskmelon	50	751	15.02	45
29.	Leafy Vegetables (Total)	94	1170	12.45	66
a.	Menthi	3	30	10.00	2
b.	Palak	12	120	10.00	7
c.	Amaranthus	23	460	20.00	28
d.	Other Leafy Vegetables	56	560	10.00	29
30.	Gourd Varieties (Total)	494	10275	20.80	795
a.	Ash Gourd	2	50	25.00	3
b.	Snake Gourd	12	204	17.00	12
c.	Bitter Gourd	11	101	9.18	9
d.	Ridge Gourd	9	81	9.00	7
e e	Pumpkin	3	90	30.00	6
	Cucumber	41	738	18.00	38

Sl. No.	Crop	Area (ha)	Production in M.Tons	Yield in Tons/Hectare	Value in Rs. Lakhs
f.					
g.	Little Finger	2	70	35.00	4
	Gherkins	414	8941	21.60	716
h.		T	II. Spice Crops		
31.	Spice Crops (Total)	5129	20233	3.94	13166
32.		6	2	0.33	4
33.	11	2556	15159	5.93	10611
34.		1	12	12.00	7
35.		1	12	12.00	7
36.	Garlic	1	9	9.00	5
37.		2498	4996	2.00	2498
38.	Coriander	50	35	0.70	21
39.	Vanilla	16	8	0.50	13
		IV.	Plantation Crops		
40.	Plantation Crops(Total)	155620	37552	0.24	52284
41.	Coconut	132587	20912	0.16	12546
42.	Arecanut	22058	37220	2	37220
43.	Betelvine	731	18615	25.47	1859
44.	Cocoa	109	64	0.59	64
45.	Cashew	130	260	2.00	587
46.	Other Plantation Crops	5	8	1.60	8
		V. Co	ommercial Flowers		
47.	Flower Crops (Total)	2959	27588	9.32	9926
a.	Aster	959	9590	10.00	1440
48.	Crossandra	154	770	5.00	1386
49.	Marigold	110	1100	10.00	88
50.	Jasmine	955	4893	5.12	4159
51.	Chrysanthamum	705	10575	15.00	2646
52.	Tube Rose	65	650	10.00	195
53.	Rose (lakh flowers)	9	18	2.00	10
54.		2	10	5.00	2

Sl. No.	Сгор	Area (ha)	Production in M.Tons	Yield in Tons/Hectare	Value in Rs. Lakhs
		VI. N	Medicinal Plants		
55.	Medicinal Plants (Total)	64	616	9.63	294
56.	Sweet Flag	58	580	10.00	290
57.	Other Medicinal Plants	6	36	6.00	4

(Source: Dept. of Horticulture, Tumakuru)

#### 2.5. Weather data

Mandh	Doinfall ()	Temperature <sup>0</sup> C		Dalatina Hamidita (0/)
Month	Rainfall (mm)	Maximum	Minimum	Relative Humidity (%)
April 18	25.0	35.58	21.28	85.42
May 18	136.0	33.28	21.61	86.33
June 18	79.0	31.09	21.72	84.58
July 18	40.0	28.59	21.53	84.23
August 18	49.0	29.74	21.38	87.54
September 18	76.0	27.23	18.65	85.72
October 18	96.0	28.63	19.76	86.91
November 18	25.0	26.23	16.65	88.72
December 18	3.0	27.75	21.54	82.94
January 19	2.3	24.53	13.86	89.42
February 19	10	32.16	16.98	78.75
March 19	0.0	35.36	18.63	74.33
Total	541.3	360.17	233.59	1014.89

## 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 ton	ns		
Crossbred	9		
Indigenous	884643	17.31	
Goats	322373	16.60	

Category	Population	Production	Productivity
Pigs	-	-	-
Crossbred	905	0.23	
Indigenous	12411		
Rabbits	560	NA	
Poultry Egg pr	oduction 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	-	-	-

**<sup>2.7</sup>** District profile maintained in the KVK has been **Updated** for 2018-19: Yes

# 2.8 Details of Operational area / Villages

Sl.N	o. 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	Nonavinakere	Byrapura Chikkabidare Gopalanapalya Gowdanakatte Kallegowdanapalya Kannaghatta Karadalu Karikere Kibbanhalli Koppa Kunduru Mundunathapura Nagalehalli Nagaraghatta Nagathihalli Paragondanahalli Sattaramanahalli T L Palya Thimalapura	3 year	Millets Redgram  Castor  Ragi,  Chilli, IFS Chilli Cattle Mushroom andAmla 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 semi looper 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, pest and disease management. Improved animal husbandry practices Income generating activities for SHG's Processing and value addition of agriculture and horticulture produce

2	Turvekere	Dhabeghatta	M V Halli Lakkasandra	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	Godekere Bagganahalli Banadevarahatti Bagganahalli Ranganahalli Ranganakere Somanahalli Kannaghatta Ranganakere Guruvapura Ganadalu Belavadi Mathighatta Madapura Mathighatta Madapura Mathighatta Sreyadanahalli	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	Sagaranahalli Kodinadevanahalli Tyagaturu Bommanahalli Kodinagenahalli N Rampura Samudrakote Muganahunase Paragondanahalli K D Halli	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	Hippadi	Doddamadure Varevanagodanadaddi Doddakoppalu	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 water management with special emphasis on micro - irrigation
2	Integrated Nutrient Management in Agri. and Horticultural crops
3	Introduction of newer varieties
4	Integrated Pest and Disease Management
5	Integrated farming system with special emphasis to livestock
6	Value addition & market linkage through CBA's / FPO's

# PART III - TECHNICAL ACHIEVEMENTS (2018-19)

3.A. Target and Achievements of mandatory activities

	O	FT		FLD							
	1				2						
	OFTs (No.)	Ts (No.) Farmers (No.)			TLDs (No.)	Farmers (No.)					
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement				
3	3	15	15	14	14	140	140				
-	-	-	-	EDP - 1	EDP - 1	2 SHG's 2 SHG's					
-	-	-	-	FFS- 1	FFS- 1	25	25				

	Training				Extension Programmes				
3				4					
Co	ourses (No.)	Participants (No.)		Programmes (No.)		Participants (No.)			
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement		
53	68	1950	2877	1192 2251		21550 22063			

	Seed P	roduction (Q)		Planting material (Nos.)						
	5			6						
	Target	Achievement		Target	Achievement					
Ragi	50.00	Failure of crops due to drought	Chilli	Chilli 12000		15800				
Redgram	15.00	5.5	Tomato	4000	Tomato	5000				
Saame	30.00	Failure of crops due to drought	Brinjal	300	Brinjal	600				
Navane	20.00	Failure of crops due to drought	Papaya	5000	Papaya	3050				
-	-	-	Drum stick	3000	Drum stick	2600				

	Livestock, poultry strai	ns and fingerlings (No.)	Bio-products (Kg)				
	,	7	8				
Г	Target	Achievement	Target	Achievement			
Calf	2	6	-	-			
Milk	3500 lt	3119 lt	-	-			
sheep	4	11	-	-			
Poultry	2	30	-	-			

#### 3.B1. Abstract of interventions undertaken

								Intervention	s					
S. No	Thrust area	Crop/ Enterprise	Identified Problem	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 o produ	cts
1	Varietal Evaluation	Paddy	Non availability of medium / fine rice varieties	Assessment of Paddy varieties for southern dry zone of Tumakuru (New)	-	3	1	-	5	Paddy seeds 1.5q	-	-	No.	Kg -
2	Varietal Evaluation	Redgram	Drought at the end of reproductive stage. Moisture stress due to low water retention by light red soils, Low yield	Assessment of Redgram varieties for terminal drought	-	2	1	-	3	40 kg	-	-	Rhyzobium Pheromone traps + lures BT	1 4+4 3 liters
3	Varietal Evaluation	Chilli	Low yielding hybrids, poor quality, Murda complex & powdery mildew disease incidence	Assessment of Chilli hybrid KBCH-1 & Arka Kyathi	-	2	1	-	-	200 g	-	-	Trichoderma	5 kg
4	Introduction variety	Finger millet	Low yield, frequent dry spells and available varieties are susceptible to incidence of blast	-	Demonstration of Finger millet variety ML365	1	1	-	-	125 kg	-	-	-	-
5	Integrated crop management	Little millet	Local variety, Poor nutrient management practices, Low income due to lack of knowledge on importance of value addition, labeling, packaging and branding	-	Integrated crop management & Value addition in Little millet (Saame)	3	-	-	2	40 kg	-	-		
6	Integrated crop management	Tomato	Use of Low yielding variety, Poor nutrient management, blight and wilt incidence	-	Integrated Crop Management in Tomato	2	1	-	-	-	-	-	-	
7	Integrated Nutrient management	Brinjal	Low yielding hybrids, poor nutrient management	-	Integrated Nutrient Management in Brinjal	2	1	-	1	500 g	-	-	Vegetable special Neem cake	50
8	Intercropping system	French Bean	Mono-cropping, no appropriate use of space, low income and poor soil fertility status	-	French Bean as a intercrop in Coconut garden	2	1	-	-	20 kg	-	-	-	
9	Integrated crop management	Chilli	Low yielding hybrids, poor nutrient management, flower drops, Murda complex & powdery mildew incidence	-	Integrated crop Management in Chilli	4	1	-	4	-	240000	-	Vegetable special	20
10	Integrated crop management	Arecanut	Poor soil fertility status, nut spitting and dropping, improper nutrient management, incidence of pest and disease and low returns	-	Integrated crop management in Arecanut	1	1	-	1	-	-	-	Trichoderma	20 kg
11	Integrated crop management	Mango	Improper canopy management Alternate bearing, Flower & fruit dropping Fruit fly & Powdery mildew menace	-	Integrated Crop management in mango (Var. Alphanso)	1	1	-	1	-	-	-	-	-

								Intervention	S					
S. No	Thrust area	Crop/ Enterprise	Identified Problem	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 o	
12	Value addition and Market linkage	Foxtail millet	Less awareness on improved varieties and ICM practices Low yield of existing varieties Low income due to lack of knowledge on importance of value addition, labeling , packaging and branding	·	Production, Branding and market linkage of value added foxtail millet products as IGA	1	1	-	2	,	·	-	-	-
13	Establishment of nutrition garden	Nutrition garden	Low nutrient intake in the children's diet make them susceptible to various diseases and micro nutrient deficiencies	-	Nutrition garden for farm families for nutrition security	4	1	-	3	Vegetable kit	12	-	-	-
14	Fodder development	Fodder var. COFS 31	Low fodder yield, Non availability of fodder through out the year and Lack of knowledge on new varieties	-	Fodder var. COFS 31 for higher yield	3	-	-	1	10 kg	-	-	-	-
15	Reducing incidence of prolapse	Buffalos	Prolapse is common during last trimister of pregnancy, decrease muscle tonicity, Improper feeding practices, Improper management practices	-	Management practices to reduce Prolapse in Buffalos	2	-	-	1	-	-	-	-	-
16	Improper nutritional management leading to reproductive disorders	Dairy Animals	Anoestrus under developed genitalia , Non functional ovaries, decreased conception rate even after Sexual maturity	-	Nutritional and Hormonal management in Dairy Animals with special emphasis to indigenous cows	2	-	-	1	-	-	-	-	-
17	Composite Fish Culture	Fish	Fish farming is not being practiced and hence resources are being wasted	-	Introduction of Composite Fish Culture in Farm ponds	3	-	-	1	-	-	-	-	-
18	IGA	Mushroom	Lack of knowledge on cultivation, health benefits and marketing linkage	-	Mushroom cultivation – IGA in SHG	2 SHG's	-	=	2	24 kg	-	-	-	-

## 3.B2. Details of technology used during reporting period

Sl.	Title of Technology	Source of technology	Crop/enterprise		]	No.of programmes con	nducted
No.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Assessment of Paddy varieties for southern dry zone of Tumakuru	UAS, B UAS, B UAS, R	Paddy	1	-	4	-
2	Assessment of Redgram varieties for terminal drought	UAS, B UAS, R PJTSAU, Telangana	Redgram	1	-	4	-
3	Assessment of Chilli hybrid KBCH-1 & Arka Kyathi	IIHR, Bangalore UAS, Bangalore	Chilli	1	-	3	

Sl.	That of a l	G 64 1 1				No.of programmes co	nducted
No.	Title of Technology	Source of technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
4	Demonstration of Finger millet variety ML365	UAS, Bangalore	Finger millet	-	1	2	
5	Integrated crop management & Value addition in Little millet (Saame)	UAS, Bangalore	Saame	-	1	3	
6	Integrated Crop Management in Tomato	IIHR, Bangalore	Tomato	-	1	2	
7	Integrated Nutrient Management in Brinjal	IIHR & PFDC, Bangalore	Brinjal	-	1	3	
8	French Bean as a intercrop in Coconut garden	IIHR, Bangalore	French Bean		1	2	
9	Integrated crop Management in Chilli	IIHR, Bangalore	Chilli	-	1	5	
10	Integrated crop management in Arecanut	C PCRI Kasaragod	Arecanut	-	1	1	-
11	Integrated Crop management in mango (Var. Alphanso)	IIHR, Bangalore	Mango	-	1	1	-
12	Production, Branding and market linkage of value added foxtail millet products as IGA	UAS, Bangalore	Foxtail millet	-	1	2	-
13	Nutrition garden for farm families for nutrition security	UAS, Bangalore	Nutrition garden	-	1	1	-
14	Fodder var. COFS 31 for higher yield	KVK, Namakal	Fodder var. COFS 31		1	2	
15	Management practices to reduce Prolapse in Buffalos	KVAFSU, Bidar	Buffalos	-	1	1	-
16	Nutritional and Hormonal management in Dairy Animals with special emphasis to indigenous cows	NDRI	Dairy Animals	-	1	1	-
17	Introduction of Composite Fish Culture in Farm ponds	KVAFSU, Bidar	Fish	-	1	1	-
18	Mushroom cultivation – IGA in SHG	IIHR, Bangalore	Mushroom	-	1	2	-

#### 3.B2 contd..

								No. of farm	ers covered							
		0	FT			FI	LD			Tra	ining			Others (	(Specify)	
Sl. No.	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	2	1	2	-	-	-	-	-	50	15	30	10	-	-	-	-
2	3	1	1	-	-	-	-	-	62	31	45	15	5	3	6	
3	2	1	1	-	-	-	-	-	20	15	10	20	-	-	-	-
4	-	-	-	-	5	3	2	2	20	30	15	10	-	-	-	-
5	-	-	-	-	8	-	2	-	47	28	34	17	15	8	12	
6	-	-	-	-	5	3	2	2	20	30	15	10	-	-	-	-
7	-	-	-	-	2	1	1	1	28	15	32	11	7	3	4	2
8	-	-	-	-	2	3	2	2	20	30	21	18	-	-	-	-
9	-	-	-	-	5	2	2	1	54	16	31	18	12	8	14	10
10	-	-	-	-	2	3	2	2	20	30	21	18	-	-	-	-
11	-	-	-	-	5	2	2	1	54	16	31	18	-	-	-	-
12	-	-	-	-	18	12	8	6	30	15	10	5	-	-	-	-
13	-	-	-	-	4	-	-	-	10	8	-	-	-	-	-	-
14	-	-	-	-	2	1	1	1	28	15	32	11	-	-	-	-
15	-	-	-	-	2	3	2	2	20	30	21	18	-	-	-	-
16	-	-	-	-	2	1	1	1	28	15	32	11	-	-	-	-
17	-	-	-	-	2	3	2	2	20	30	21	18	-	-	-	-
18	-	-	-	-	-	20	-	10	-	30	-	-	-	-	-	-

# PART IV - On Farm Trial (2018-19)

#### 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	TOTAL
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Varietal Evaluation	1		1		1					3
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	1		1		1					3

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

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

Thematic areas	Cattle	Poultry	Piggery	Rabbit	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

Thematic areas	Cattle	Poultry	Piggery	Rabbit	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	Сгор	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		Assessment of Paddy varieties for southern dry zone of Tumkur	5	5	2.0 ha
		Assessment of Redgram varieties for terminal drought	5	5	2.0 ha
	Chilli	Assessment of Chilli hybrids KBCH-1and Arka Kyathi	5	5	0.6 ha
Integrated Pest Management	-	-	-	-	-
	-	-	ı	-	-
Integrated Crop Management	-	-	-	-	=
	-	-	ı	-	-
Integrated Disease Management	-	-	-	-	-
	-	-	ı	-	-
Small Scale Income Generation Enterprises	-	-	ı	-	-
	-	-	ı	-	=
Weed Management	-	-	ı	-	-
	-	-	-	-	-
Integrated Farming System	-	-	ı	-	-
	-	-	-	-	-
Seed / Plant production	-	-	1	-	-
	-	-	ı	-	-
Value addition	-	-	ı	-	-
	-	-	ı	-	ı
Drudgery Reduction	-	-	1	-	-
	-	-	ı	-	-
Storage Technique	-	-	-	-	-
	-	-	ı	-	-
Mushroom cultivation	-	-	-	-	-
	-	-	-	-	-
Total			15	15	4.6

# 4.B.2. Technologies Refined under various Crops

Thematic areas	Стор	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	-	-	-	-	-
	-	<del>-</del>	-	-	-
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

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 Livestock and other enterprises

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**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield	Unit of yield	Observations other than yield	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
					TO 1: IR-64 Duration:130 - 135 days, Grain type: Bold, Yield: 45–50 q/ha	Farmer's practice	41.5	q/ha	Plant height (cm)- 85.00 Tillers / hill - 22 Blast incidence (%)- 6.5 Sheath blight (%)-4.5 Stem borer damage (%)- 12.5	42500	1.55	-
Paddy	Irrigated	Non availability of medium / fine rice varieties	Assessment of Paddy varieties for southern dry zone of Tumkur	5	TO 2: JGL -1798 Duration :130 - 135 days, Grain type : Medium slender Yield : 50–55	UAS(B)	45.0	q/ha	Plant height (cm)- 92.00 Tillers / hill – 28.5 Blast incidence (%)- 8.5 Sheath blight (%)-6.5 Stem borer damage (%)- 8.0	45000	1.69	-
					TO 3: Gangavathi sona (IET 20594) Duration :130 - 135 days, Grain type : Medium slender, Yield : 65 - 70 q/ha	UAS(R)	52.5	q/ha	Plant height (cm)- 105 Tillers / hill – 34 Blast incidence (%)- 3.5 Sheath blight (%)-2.5 Stem borer damage (%)- 5.5	61500	1.98	-

#### 4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

- 1. Title of Technology Assessed: Assessment of Paddy varieties for southern dry zone of Tumkur
- 2. Performance of the Technology on specific indicators among the verities evaluated Gangavathi sona (IET 20594) performed well in terms of yield and economics
- 3. Specific Feedback from farmers If Gangavathi sona (IET 20594) variety is brought under seed chain it will be more useful to grow in larger area
- 4. Specific Feedback from Extension personnel and other stakeholders Fine rice variety Gangavathi sona (IET 20594) will be popularized in the future days
- 5. Feedback to Research System based on results and feedback received : --

#### **Results of On Farm Trial**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technolog	Yield	Unit of yield	Observations other than yield	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
		Down ha stale			TO.1 – Variety BRG-2 Duration: 150 – 175 days	Farmer's practice	7.88	q/ha	Plant Height (cm)– 112.20 No. of Branches / plant – 7 Days to 50 % flowering –119 No. of Pods / Plant –187 Chaffiness % - 13.70	38.022	1.84	-
Dodarom	Rainfed	Drought at the end of reproductive stage Moisture stress due to	Assessment of redgram varieties	5.0	TO.2- Variety BRG 4 Duration: 140 – 145 days	UAS(B)	7.50	q/ha	Plant Height – 95.0 No. of Branches / plant – 6 Days to 50% flowering –106 No. of Pods / Plant –144 Chaffiness % - 10.80	36,457	1.77	-
Redgram	Kainied	low water retention by light red soil and lower yield	for terminal drought	3.0	TO.3- Variety TS-3R Duration: 140 – 150 days	UAS(R)	6.25	q/ha	Plant Height – 84.80 No. of Branches / plant – 5 Days to 50% flowering –90 No. of Pods / Plant – 93 Chaffiness % - 4.72	34,055	1.61	-
		yieid			TO.2- Variety Ujwala Duration : 130 to 140 days	PJITSAU, Telangana	6.60	q/ha	Plant Height – 93.0 No. of Branches / plant – 5 Days to 50% flowering –97 No. of Pods / Plant –112 Chaffiness % -7.12	36,098	1.65	-

#### 4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

- 1. Title of Technology Assessed: Assessment of redgram varieties for terminal drought
- 2. Performance of the Technology on specific indicators :
  - The higher yield was observed in BRG -2 variety compared to short duration varieties at the cost of 25 to 35 more duration
- 3. Specific Feedback from farmers: Among the four Varieties BRG 2 has performed higher yield under drought condition and Pulse magic spray helped in reduction of flower drops
- 4. Specific Feedback from Extension personnel and other stakeholders Higher performance of BRG-2 variety may help to popularize under moisture stress condition
- 5. Feedback to Research System based on results and feedback received This variety may get popularize through two to three testing

#### Results of On Farm Trial chilli

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Source of technology	Yield	Unit of yield	Observations other than yield	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
		Low yielding hybrids, poor	Assessment of Chilli		TO1: Ulka hybrid (Pvt.)	Farmer's practice	224.0	q/ha	-	1,16,300	2.21	
Chilli	Irrigation	quality, leaf curling and powdery	hybrids KBCH- 1and Arka	5	TO2: Arka Kyathi	IIHR(B)	262.0	q/ha	-	1,68,100	2.82	
		mildew disease incidence	Kyathi		TO3:DC 1007 hybrid	UAS(D)	249.5	q/ha	-	1,53,700	2.90	

Parameters	TO 1: Ulka hybrid (Pvt.)	TO 2 : Arka Kyathi	TO 3 : KBCH-1
Fruit length (cm)	9.3	11.5	10.0
Fruit width (cm)	1.4	1.1	1.3
Fruit weight / plant (g)	1185	1470	1360
No. of fruits / plant	132	147	141
Incidence of anthracnose (%)	9.25	4.50	2.00
Incidence of powdery mildew (%)	12.50	7.00	3.25
Incidence of bacterial wilt (%)	7.00	4.25	1.50
Gross cost (Rs./ha)	96,500	92,900	85,800
Gross Return(Rs./ha)	2,12,800	2,62,000	2,49,500

#### 4.C2. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

- 1. Title of Technology Assessed :Assessment of Chilli hybrids KBCH-1and ArkaKyathi
- 2. Performance of the Technology on specific indicators: Low disease incident
- 3. Specific Feedback from farmers: Lack of availability of seeds at locally
- 4. Specific Feedback from Extension personnel and other stakeholders: Chilli hybrid KBCH-1 has resulted higher net income with market demand as compared to others 5.

Feedback to Research System based on results and feedback received

#### 4.D1. Results of Technologies Refined

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Refined	Source of technology	Yield	Unit of yield	Observations other than yield	Net Return Rs. / unit	BC Ratio	Remarks if any
1	2	3	4	5	6	7	8	9	10	11	12	13
-	-	-	-	1	T.O.1 (Farmers practice)	-	-	-	-	-	-	-
-	-	-	-	1	T.O.2	-	-	-	-	-	-	-
-	-	-	-	ı	T.O.3	-	-	-	-	-	-	-
-	-	-	-	-		-	-	-	-	-	-	-

#### 4.D.2. Details of Technologies refined:

- 1. Title of Technology Refined
- 2. Performance of the Technology on specific indicators
- 3. Specific Feedback from farmers
- 4. Specific Feedback from Extension personnel and other stakeholders
- 5. Feedback to Research System based on results/feedback received

# PART V - FRONTLINE DEMONSTRATIONS (2018-19)

## 5.A. Summary of FLDs implemented

Sl.		Farming			Variety/		Thematic		Area	(ha)	Farmer	rs (No.)	Farmers	(No.)
No	Category	Situation	Season	Crop	breed	Hybrid	area	Technology Demonstrated	Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
	Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pulses	-	-	-	-	-	-	-	-	-	-	-	-	-
1	Cereals	Rainfed	Kharif	Finger millet	ML - 365	-	ICM	Demonstration of Finger millet variety ML-365  * 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)	10	10	8	17	22	3
2	Millets	Rainfed	Kharif	Saame (Little millet)	OLM-203	-	ICM	Integrated Crop Management and value addition in Little millet (Saame)  • Use of Improved variety OLM-203  • Micronutrients management : ZnSO <sub>4</sub> @ 5 kg/Ac and Borax @ 2 kg/Ac  • Preparation of Value added products	4.0	4.0	2	8	10	0
3	Millets	Rainfed	Kharif	Foxtail millet	SIA- 326	-	ICM	Production, Branding and Market linkage of value added foxtail millet products as IGA  Demonstrated value added products such as payasa mix, palav mix, chakli, nipattu and papad,  packaging , branding and Marketing	-	-	12	28	40	-
4	Vegetables	Irrigated	Kharif	Chilli		Arka Kyathi	ICM	Integrated Crop Management in chilli  Use of high yield Hybrid –Arka Kyathi  Foliar spray of Vegetable special @ 5g / liter  Spray of Planofix (0.02%) for control of flower drop  Need based Plant Protection Chemical	2.0	2.0	3	7	8	2

S1.		Farming			Variety/		Thematic		Area	(ha)	Farmer	rs (No.)	Farmers	(No.)
No ·	Category	Situation	Season	Crop	breed	Hybrid	area	Technology Demonstrated	Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
5	Vegetables	Irrigated	Rabi	Brinjal	Arka Harshit ha	-	INM	Integrated Nutrient Management in Brinjal  Foliar spray of Vegetable special @ 5g / liter  Application of Neem cake @ 50 kg / demo  Followed fertigation schedule for water soluble fertilizer @ 45, 75, 100 DAP  Need based Plant Protection Chemical	1.0	1.0	2	3	5	0
6	Vegetables	Irrigated	Rabi	Tomato		Arka Samra t	ICM	Integrated Crop Management in Tomato  ❖ Use of high yield Hybrid -Arka samrat ❖ Fertigation schedule ❖ Foliar spray of Vegetable special ❖ Application of Neem cake Need based Plant Protection Chemical	2	2	4	6	4	6
7	Vegetables	Irrigated	Summer	French beans		Arka Arjun	Intercr opping system	<ul> <li>French Bean as a intercrop in Coconut garden</li> <li>❖ Use of Arka Arjuna as a intercrop in coconut garden,</li> <li>❖ Seed treatment with Rhizobium</li> <li>❖ Vegetable Special- 2 gm /lit at flower initiation stage and regular 15 days interval</li> <li>❖ Need based Plant Protection Chemical</li> </ul>	2	2	4	6	3	7
	Flowers	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ornamental	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fruit	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Fruit	Raifed	Perennial	Mango	Alphan so		ICM	Integrated Crop management in mango (Var. Alphanso)  ❖ Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop  ❖ Application of Paclobutrazol drenching at 5 ml/10 liter of water for inducing regular bearing  ❖ Use of Mango special @ 5 g/L  ❖ Fruit fly traps - 20 No. /ha Need based PP chemical	2	2	2	8	5	5
	Spices and condiments	-	-	-	-	-	-	-	-	-	-	-	-	-

Com Med and Fode  9  Plan  Fibr	Category ommercial edicinal d aromatic odder antation	Farming Situation  -  -  Irrigated	Season  Perennial	Crop  -  -  -  Arecanut	Variety/breed  Hirehal li local	Hybrid	Thematic area	Technology Demonstrated  -  -  Integrated crop management in Arecanut  Soil test based nutrient application 100:40:140 g NPK/palm/yr  Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting  Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas	Proposed  -  -  2	Actual 2	SC/ST 3	Others 7	Small/ Marginal 3	Others 7
Med and Fodd	edicinal d aromatic odder antation	-	-	-	- - Hirehal	-	-	- Integrated crop management in Arecanut  Soil test based nutrient application 100:40:140 g NPK/palm/yr Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas	-	-	-	-	-	-
9 Plan	d aromatic odder	-	-	-	- Hirehal	-	-	Arecanut  ❖ Soil test based nutrient application 100:40:140 g NPK/palm/yr  ❖ Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting  ❖ Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas	-	-	-	•	-	-
9 Plan	antation				Hirehal			Arecanut  ❖ Soil test based nutrient application 100:40:140 g NPK/palm/yr  ❖ Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting  ❖ Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas						
Plan Fibr					Hirehal			Arecanut  ❖ Soil test based nutrient application 100:40:140 g NPK/palm/yr  ❖ Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting  ❖ Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas		2		7	3	7
10	bre /													
	odder	-	-	Fodder var. COFS 31	-	-	-	fluoroscens @ 100g each / palm/ year  Cowpea as green manures, which improve soil fertility status  Fodder var. COFS 31 for higher yield  Use of fodder var. CoFS 31  Average fodder yield 190 t/ha  Protein content 9.86 %	1	1	2	3	2	3
11 Dair	airy	-	-	Buffalo	-	-	-	Management practices to reduce Prolapse in Buffalos  Supplementation of calcium for maintaining muscle tonicity Supplementing mineral mixture (50gm daily) and trace minerals Method demonstration and training on managemental aspects Supplementing vitamins orally	10	10	4	6	5	5
12 Dair	airy	-	-	Desi Animals	-	-	-	Nutritional and Hormonal management in Desi Animals  Supplementing mineral mixture (50gm daily), concentrate feed (2 kg daily) and trace minerals  Administration of phosphorus (15 ml /IM 15 days once)  Hormone therapy  Supplementing vitamins orally	10	10	4	6	6	4
Poul	oultry	-	_	-	-	-	-	-	-	-	-	-	-	-
Rab		_	_	_	_	_	_	_	_	_	_	_	_	-

Sl.		F			V:/		Th		Area	(ha)	Farmer	rs (No.)	Farmers	(No.)
No	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
	Piggery	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sheep and													
	goat	-	-	-	-	-	-	-	-	-	-	-	-	-
	Duckery	-	-	-	-	-	-	-	-	-	-	-	-	-
	Common													
	carps	-	-	-	-	-	-	-	-	-	-	-	-	-
13	composite Fish culture	-	-	Composite Fish culture	-	-	-	Introduction of Composite Fish Culture in Farm ponds  Rearing 3 Carp species in farm ponds  Manuring at rate of 5000 kg/hectare  Partial water exchange  Rearing Carps at  4:3:3(catla:Rohu:Common Carp) in 1000sq/ft	10	10	4	6	5	5
	Mussels	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ornamental													
	fishes	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Oyster mushroom	-	-	Mushroom	Oyster	-	-	Mushroom Cultivation- activity in SHG  ✓ Mushroom cultivation ✓ packaging , branding and Marketing	-	-	10	20	-	-
	Button mushroom	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vermicompos t	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sericulture	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-
	Implements	-	-	-	-	-	-	-	-	-	-	-	-	-
	Others (specify)	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Nutrition garden	-	Rabi	Vegetable s	-	-	-	Nutrition garden for nutritional security of farm families  ✓ Establishment of nutrition garden ✓ Nutrition education	9.43 gunta	9.43 gunta	-	4	4	-

## 5.A. 1. Soil fertility status of FLDs plots, if analysed

Sl.	Category	Farming	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and	S	tatus of s	oil	Previous crop grown
No.		Situation	Year	•					year	N	P	K	-
	Oilseeds Pulses	-	-	-	-	-	-	-	-	-	-	-	-
1	Cereals	Rainfed	Kharif 2018	Fingar millet	ML-365	-	ICM	Demonstration of Finger millet variety ML-365  * 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	Kharif 2018	Н	M	M	Finger millet, Horse gram
2	Millets	Rainfed	Kharif	Saame (Little millet)	OLM-203	-	ICM	Integrated Crop Management and value addition in Little millet (Saame)  • Use of Improved variety OLM-203  • Micronutrients management: ZnSO <sub>4</sub> @ 5 kg/Ac and Borax @ 2 kg/Ac  • Preparation of Value added products	Kharif 2018	M	M	Н	Horse gram
3	Vegetables	Irrigated	Kharif	Chilli		Arka Kyathi	ICM	Integrated Crop Management in chilli  Use of high yield Hybrid – Arka Kyathi Foliar spray of Vegetable special @ 5g / liter  Spray of Planofix (0.02%) for control of flower drop Need based Plant Protection Chemical	Kharif 2018	L	М	М	Redgram
4	Vegetables	Irrigated	Rabi	Brinjal	Arka Harshitha	-	INM	Integrated Nutrient Management in Brinjal  Foliar spray of Vegetable special  5g / liter  Application of Neem cake @ 50  kg / demo  Followed fertigation schedule for water soluble fertilizer @  45, 75, 100 DAP  Need based Plant Protection Chemical	Rabi 2018	М	М	н	Chilli

Sl. No.	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year		tatus of so		Previous crop grown
NO.	Vegetables	Irrigated	Year Rabi, 2018	Tomato		Arka Samrat	ICM	Integrated Crop Management in Tomato	Rabi, 2018	N M	P L	K M	Chilli
5								<ul> <li>❖ Use of high yield Hybrid -Arka samrat</li> <li>❖ Fertigation schedule</li> <li>❖ Foliar spray of Vegetable special</li> <li>❖ Application of Neem cake</li> <li>Need based Plant Protection</li> <li>Chemical</li> </ul>					
6	Vegetables	Irrigated	Summer 2018	French beans		Arka Arjun	Intercropping system	French Bean as a intercrop in Coconut garden   ❖ Use of Arka Arjuna as a intercrop in coconut garden,  ❖ Seed treatment with Rhizobium  ❖ Vegetable Special- 2 gm /lit at flower initiation stage and regular 15 days interval  ❖ Need based Plant Protection Chemical	Summer 2018	Н	М	М	Cowpea,
	Flowers	-	-	-	-	-	-	-	-	-	-	-	-
	Ornamental	-	-	-	-	-	-	-	-	-	-	-	-
7	Fruit	Raifed	Perennial 2018	Mango	Alphanso		ICM	Integrated Crop management in mango (Var. Alphanso)  ❖ Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop  ❖ Application of Paclobutrazol drenching at 5 ml/ 10 liter of water for inducing regular bearing  ❖ Use of Mango special @ 5 g/L  ❖ Fruit fly traps - 20 No. /ha Need based PP chemical	Perennial 2018	М	L	L	Mango
	Spices and condiments	-	-	-	-	-	-	-	-	-	-	-	-
	Commercial	-	-	-	-	-	-	-	-	-	-	-	-
	Medicinal and aromatic	-	-	-	-	-	-	-	-	-	-	-	-
·	Fodder												

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and	S	tatus of so	Previous crop grown	
NO.									year	N	P	K	
8	Plantation	Irrigated	Perennial 2018	Arecanut	Hirehalli local		ICM	Integrated crop management in Arecanut  Soil test based nutrient application 100:40:140 g NPK/palm/yr  Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year Cowpea as green manures, which improve soil fertility status	Perennial 2018	M	M	L	Arecanut
	Fibre	-	-	-	-	-	-	-	-	-	-	-	-

#### 5.B. Results of FLDs

## **5.B.1.** Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				%	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
								Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							Н	L	A										
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cereals	Demonstration of Finger millet variety ML-365  * 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	26.5	18.5	21.5	16.5	30.30	23,500	62,350	38,850	2.65	22,500	47,850	23350	2.12

Crop	Name of the technology	Variety	Hybrid	Farming	No. of	Area		Yield	(q/ha)		%	*Econo	mics of demo				*Economics (Rs./ha	a)	
Стор	demonstrated	variety	Hybrid	situation	Demo.	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Millets	Integrated Crop Management and value addition in Little millet (Saame)  • Use of Improved variety OLM-203  • Micronutrients management: ZnSO <sub>4</sub> @ 5 kg/Ac and Borax @ 2 kg/Ac  • Preparation of Value added products	OLM 203	-	Rainfed	10	4.0	10.74	9.15	9.95	7.68	29.58	9500	22873	13373	1.41	8500	17670	9170	1.08
Vegetables	Integrated Crop Management in chilli  Use of high yield Hybrid –Arka Kyathi  Foliar spray of Vegetable special @ 5g / liter  Spray of Planofix (0.02%) for control of flower drop  Need based Plant Protection Chemical	-	Arka Kyathi	Irrigated	10	2.0	290.3	325.7	306.3	219.6	39.44	115000	367500	252500	2.20	95000	263556	168556	1.77
Vegetables	Integrated Nutrient Management in Brinjal  Foliar spray of Vegetable special @ 5g / liter  Application of Neem cake @ 50 kg / demo Followed fertigation schedule for water soluble fertilizer @ 45, 75, 100 DAP  Need based Plant Protection Chemical	Arka Harshitha	-	Irrigated	5	1.0	385	326	354	292	21.11	90650	229970	139320	2.54	81900	175280	93380	2.14

	Name of the technology	***	** 1 . 1	Farming	No. of	Area		Yield	l (q/ha)		%						*Economics of check (Rs./ha)			
Crop	demonstrated	Variety	Hybrid	situation	Demo.	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
	Integrated Crop Management in Tomato											Cost	Roturn	Roturn	Bek	Cost	Roturi	Roturn	Bek	
Tomato	<ul> <li>❖ Use of high yield Hybrid - Arka samrat</li> <li>❖ Fertigation schedule</li> <li>❖ Foliar spray of Vegetable special</li> <li>❖ Application of Neem cake Need based Plant Protection Chemical</li> </ul>		Arka Samrat	Irrigated	10	2	684	510	655	520	25.96	95000	2,62,000	167000	2.76	1,03,000	2,08,000	105000	2.02	
French beans	French Bean as a intercrop in Coconut garden  Use of Arka Arjuna as a intercrop in coconut garden, Seed treatment with Rhizobium Vegetable Special- 2 gm /lit at flower initiation stage and regular 15 days interval Need based Plant Protection Chemical		Arka Arjun	Irrigated	10	2	Coconut:  9150 nuts/ha + Beans yield: 54.50	Coconut: 7050 nuts/ha + Beans yield 33.76	Coconut:  8750 nuts/ha + Beans yield 46.50	Coconut: 8707 nuts/ha monocrop	monocrop	54,814	1,51,500	96,686	2.77	39,814	1,04,484	64670	2.62	
Flowers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ornamental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fruit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mango	Integrated Crop management in mango (Var. Alphanso)  ❖ Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop  ❖ Application of Paclobutrazol drenching at 5 ml/ 10 liter of water for inducing regular bearing  ❖ Use of Mango special @ 5 g/L  ❖ Fruit fly traps - 20 No. /ha Need based PP chemical	Alphanso		Raifed	10	2						Harve	sting stage							
Spices and condiments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	
Fibre crops like cotton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Medicinal and aromatic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Crop	Name of the technology	Variety	Hybrid	Farming	No. of	Area		Yield	(q/ha)		%	, -				*Economics of check (Rs./ha)			
Стор	demonstrated	variety	Tryona	situation	Demo.	(ha)		Demo		Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Fodder	Fodder var. COFS 31 for higher yield	COFS 31	-	Rainfed	20	4	160	140	150	130	20.00	-	-	-	-	-	-	-	-
Plantation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ī	-
Arecanut	Integrated crop management in Arecanut  Soil test based nutrient application 100:40:140 g NPK/palm/yr Application of Boran 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year Cowpea as green manures, which improve soil fertility status	Hirehalli local		Irrigated	10	2	17.50	14.75	15.25	13.10	16.41	140500	381250	240750	2.71	148900	327500	178600	2.20
Fibre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
Others (pl.specify)	Establishment of nutrition garden Nutrition education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Title of FLD	Data on other parameters in a	elation to technology demo	nstrated
Title of FLD	Parameter with unit	Demo	Check
	Plant height (cm)	92	84
Demonstration of Finger millet variety ML-365	No. of Tillers / plant	6	5
Demonstration of ringer infliet variety ML-303	No. of fingers / ear head	6	5
	Blast incidence %	2.50	12.50
	Plant height (cm)	78	72
	No. of fruits / plant	96	82
	Days taken for flowering	46-48	44-47
Integrated Crop Management in Tomato	Days taken for harvesting	72-75	65-71
	Leaf curling	2.30	8.25
	Blight	3.30	13.50
	Bacterial wilt	1.00	7.50
	French bean- Plant height (cm)	48	
	French bean -Number of branches	8-10	
French Bean as a intercrop in Coconut garden	French bean -Number of pickings	3-4	Monocropping
	French bean -Number of pods/plant	50-60	
	French bean -Length of pods (cm)	13-15	

Tials of ELD	Data on other parameter	s in relation to technology demons	strated
Title of FLD	Parameter with unit	Demo	Check
Integrated grap management in Araganut	% Nut splitting	2.0	6.50
Integrated crop management in Arecanut	% Nut dropping	2.5	5.75
	Plant height (cm)	92.4	67.2
	No. of Branches / plant	8	6
Integrated Cran Management in shilli	No. of fruits / branch	18	15
Integrated Crop Management in chilli	Fruit length (cm)	9.89	9.04
	Fruit girth (cm)	1.09	0.83
	Incidence of powdery mildew (%)	2.1	5.7
	Plant height (cm)	88.74	76.12
	No. of Branches / plant	8	6
Integrated Nutrient Management in Brinjal	No. of fruits / plant	28	21
	Average fruit weight (g)	44.87	36.17
	Fruit and shoot borer incidence (%)	8.37	1.60
Integrated Crop Management and value addition in Little millet	Plant height (cm)	87.4	71.4
(Saame)	No. of panicles / plant	8	6

## FLD: Production, Branding and Market linkage of value added foxtail millet products as IGA

	Check		Demo plot
Parameter	Direct selling	Processed rice	Value Addition
			(Chakkali, Nippattu)
Total cost (Rs/q)	3500	3500 + 500 = 4000	8100
Gross income (Rs/q)	3500	5400	18,000
Net income (Rs/q)	0	1400	9900
B:C ratio	1	1.35	2.22

# FLD: Nutrition garden for nutritional security of farm families

Sl No	Family Details	Area approximate	Status	% of Vegetable met from Nutrition garden and amount saved
1	Kumarswami S/o Shivayya Koppa Family type : nuclear (3 in no)	5445 Sq.ft	Vegetables harvested -160 kg (Leafy veg, tomato, chilli, radish,bottle gourd,beetroot Ridge gourd)	Percentage vegetable requirement met - 39.50 and saved Rs.3200

2	Lohit S/o Rajeshwar Hulkatte Family type : nuclear (4 in no)	1800 Sq.ft.	Vegetables harvested -72 kg. Leafy vegetables, Tomato, Chilli, Radish, other Veg.	Percentage Vegetable requirement met 20.00 and saved Rs.1440
3	Babu S/o Chikkabasavvya Eachnoor Family Type: joint (6 in no)	1633 Sq.ft	Vegetables harvested -78 kg. Radish,Spinch, Tomato, Chilli, other vegetables	Percentage Vegetable requirement met 14.33 and saved Rs.1560
4	Vedavathi W/o Chandrakant Hulkatte Family Type: joint family (8 in no)	1400 Square feet	Vegetables harvested -68 kg (Leafy veg, tomato, chilli, Radish, Ridge gourd, bottle gourd)	Percentage Vegetable requirement met - 9.4 and saved Rs.1000
	Average	2569.5 sq ft	Vegetables harvested - 94.50 kg	Percentage Vegetable requirement met -21.00 and save Rs.1800/-

**5.B.2.** Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No.		Yield (kg		g/animal)	% Increase	*Economics of demonstration Rs./unit)				*Economics of check (Rs./unit)				
Type of fivestock	Name of the technology demonstrated	Бтеец	No. of Dellio	of Units	De	emo		Check if any	% increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Dairy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Poultry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Rabbitry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pigerry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sheep and goat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Duckery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others (pl.specify)	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	

<sup>\*</sup> Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

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

Sl. No	FLD Title	Particular	Check	Demonstration
1	Management practices to reduce Prolapse in Buffalos	Occurrence of Prolapse	20%	1%
1	Management practices to reduce Frompse in Burraios	Percentage of Metritis	16%	0%
2	Nutritional and Hormonal management in Dairy Animals with special	Time taken for Involution of uterus	180	95
2	emphasis to indigenous cows	Number of insemination	6	2

#### **5.B.3. Fisheries**

Type of			No of	No. of Units/		Units/ Y		Yield (q/ha)		%	*Economics of demonstration Rs./unit) or (Rs./m2)				*Economics of check Rs./unit) or (Rs./m2)			
Breed	Name of the technology demonstrated	Breed	Demo	Area (m <sup>2</sup> )	De	mo		Check if any	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Common carps	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	
Mussels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ornamental																		
fishes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others	Introduction of Composite Fish	Common carp,	10						Dama	nstration	was fails	ed due to se	voro dre	waht				
(pl.specify)	Culture in Farm ponds	Rahu, Catla	10	-					Dellio	nsuation	was falle	ed due to se	vere are	ougiit				

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

but on additional parameters other than yield (vizin reduction of percentage discusses, effective use of tand ever)												
Data on other parameters in relation to technology demonstrated												
Parameter with unit	Parameter with unit Demo Check if any											
-	-	-										
-	-	-										
-	-	-										
	-	- '										

## 5.B.4. Other enterprises

Entomolisa	Name of the technology	Variety/	No. of	Units/	Mush	room Y	ield for	10 kg spawn	%	*Econo		onstration (Rs./vs./m2)	unit) or			cs of check or (Rs./m2)	
Enterprise	demonstrated	species	Demo	Area {m²}		Demo		Check if any	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					Н	L	A										
Oyster mushroom	Mushroom Cultivation- IGA activity in SHG  ✓ Mushroom cultivation ✓ packaging , branding and Marketing	Oyster	2	-	23	14	18.5	-	-	1888	4720	2832	1:2.5	-	-	-	-
Button mushroom	-	-	1	1	-	-	-	-	1	ı	ı	-	ı	-	-	1	-
Vermicompost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### 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	n to technology demonstrated
Parameter with unit	Demo	Local
-	-	-
-	-	-
-	-	-

## 5.B.5. Farm implements and machinery

Name of the	Cost of the	Name of the technology	No. of	Area covered		equirement indays	%	Savings in labour	*Econor	nics of dem	onstration (I	Rs./ha)			s of check /ha)	
implement	implement in Rs.	demonstrated	Demo	under demo in ha	Demo	Check	save	(Rs./ha)	Gross cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

	Data on other parameters in relation	n 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	5	230	-
2	Farmers Training	42	1250	-
3	Media coverage	7	-	-
4	Training for extension functionaries	2	80	-
5	Others (Please specify)	-	-	-

#### PART VI – DEMONSTRATIONS ON CROP HYBRIDS (2018-19)

### Demonstration details on crop hybrids: NIL

						Vial	1 (a/la	۵)		*Ec	conomics o	of demonstrat	ion		*Econom	ics of check	
Type of Breed	Name of the technology	Name of the	No. of	Area		Yield	ı (q/11	a)	%		(R	s./ha)			(R	s./ha)	
Type of Breed	demonstrated	hybrid	Demo	(ha)		Demo		Check	Increase	Gross	Gross	Net	**	Gross	Gross	Net	**
						Demo		Check		Cost	Return	Return	BCR	Cost	Return	Return	BCR
					Н	L	Α										
Cereals	-	-	-	-	-	ı	-	-	-	-	-	-	-	-	-	-	-
Bajra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		1	ı	1		1						1				1	
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paddy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Castor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mustard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Groundnut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soybean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Greengram	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blackgram	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bengalgram	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redgram	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetable crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bottle gourd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capsicum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cucumber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tomato	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brinjal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Okra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Onion	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field bean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
crops					1								1			<b></b>	
Sugarcane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coconut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fodder crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize (Fodder)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum (Fodder)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Total	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-

## PART VII. TRAINING (2018-19)

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

	No. of					No. of Participa	nts			
Area of training	Courses		General	T =====		SC/ST			Grand Total	
Crop Production		Male	Female	Total	Male	Female	Total	Male	Female	Total
	-	-	-	-	-	-	-	-	-	-
Weed Management	1	28	7	35	9	6	15	37	13	50
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	1	25	7	32	10	3	13	35	10	45
Micro Irrigation/Irrigation	1	32	6	38	9	6	15	41	12	53
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
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	1	13	6	19	9	2	11	22	8	30
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	1	9	7	16	10	3	13	19	10	29
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	-	_	_	_	_	_	_	_	_	_
Management of young plants/orchards	1	10	10	20	5	3	8	15	13	28
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	1	9	7	16	10	3	13	19	10	29
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)	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	1	19	2	21	9	2	11	28	4	32
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	2	42	3	45	5	1	6	47	4	51
Integrated water management	1	16	3	19	10	4	14	26	7	33
Integrated nutrient management	1	25	4	29	7	4	11	32	8	40
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	1	15	4	19	6	1	7	21	5	26
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Livestock Production and Management	-	-	-	-	-	-	-	-	-	-
Dairy Management	2	12	33	45	6	12	18	18	45	63
Poultry Management	1	5	13	18	4	6	10	9	19	28
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	1	6	14	20	1	4	5	7	18	25
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	1	2	13	15	2	8	10	4	21	25
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	1	1	18	19	1	3	4	2	21	23
Storage loss minimization techniques	_	_	-	_	-	-	-	-	-	-
Value addition	1	1	24	25	-	6	6	1	30	31
Women empowerment	1	-	18	18	-	9	9	-	27	27
Location specific drudgery production	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
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	1	26	9	35	4	2	6	30	11	41
Post Harvest Technology	1	7	16	23	7	12	19	14	28	42
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	2	28	4	32	19	4	23	47	8	55
Integrated Disease Management	2	30	6	36	21	3	24	51	9	60
Bio-control of pests and diseases	1	9	1	10	11	2	13	20	3	23
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
Fisheries	-	-	-	-	-	-	-	-	-	-
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-

Composite fish culture  Hatchery management and culture of freshwater prawn  Breeding and culture of ornamental fishes	-	-	-	-			-	
Hatchery management and culture of freshwater prawn  Breeding and culture of organizations.					-	-	-	_
Breeding and culture of ornamental fiches		_	-	-	_	_	_	-
Breeding and culture of ornamental rishes	_	_	-	-	_	-	-	_
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								
Rio-agents production	-	-	-	-	-	-	-	-
Rio-pesticides production	-	-	-	-	-	-	-	-
Rio fartilizar production	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-
Production of Rea colonies and way 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	-	-	-	-	-	-	-	-	-	-
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	28	430	244	674	189	122	311	619	366	985

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

	No. of					No. of Participa	nts			
Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	1	18	4	22	10	3	13	28	7	35
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	1	22	5	27	12	1	13	34	6	40
Integrated Farming	1	29	2	31	8	6	14	37	8	45
45Micro Irrigation/Irrigation	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	1	21	4	25	6	2	8	27	6	33
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	-	-	-	-	-	-	-	-	-	-
Off-season vegetables	3	30	9	39	27	12	39	57	21	78
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	2	28	2	30	17	6	23	45	8	53
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	2	25	10	35	20	5	25	45	15	60
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)	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	2	20	8	28	10	3	13	30	11	41
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	1	45	15	60	20	7	27	65	22	87
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated nutrient management	2	89	19	108	32	10	42	121	29	150
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	1	5	30	35	5	10	15	10	40	50
Poultry Management	1	3	39	42	3	5	8	6	44	50
Piggery Management	_	_	_	_	-	-	-	-	-	-

	ı	T	1		1	1		1	1	
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	1	2	39	41	3	6	9	5	45	50
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	7	41	48	5	12	17	12	53	65
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery production	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	2	17	55	72	10	16	26	27	71	98
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)	-	-	-	-	-	-	-	-	-	-
	1	1	1	1	1	1		1	1	1

Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	3	43	32	75	10	8	18	53	40	93
Integrated Disease Management	4	39	32	71	24	10	34	63	42	105
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-
Mushroom production	-	-	-	-	-	-	-	-	-	-
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	28	459	356	815	231	123	354	690	479	1169

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

	No. of				No. o	of Participants				
Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
		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	25	6	31	9	2	11	34	8	42

	No. of				No.	of Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	1	12	5	17	6	5	11	18	10	28
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	1	8	9	17	9	4	13	17	13	30
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	1	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	=	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	1	7	18	25	10	5	15	17	23	40
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	-	-	-	-	-	-	-	-	-	-

	No. of				No. o	of Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Fish harvest and processing technology	=	-	-	-	-	-	=	-	=	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	4	52	38	90	34	16	50	86	54	140

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

	No. of				No. o	f Participants				
Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
		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	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-

	No. of				No. o	f Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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)	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-

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

Area of training	No. of				No.	of Participants				
Area of training	Courses		General			SC/ST		Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	-	-	-	-	=	-	-	-	-	-
Integrated Pest Management	1	25	4	29	12	8	20	37	12	49
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-

	No. of				No.	of Participants				
Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	1	6	22	28	2	13	15	8	35	43
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	1	31	13	44	12	5	17	43	18	61
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
Total	3	62	39	101	26	26	52	88	65	153

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

	No. of				No.	of Participants						
Area of training	Courses		General			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-		
Integrated Pest Management	1	25	4	29	12	8	20	37	12	49		
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	1	6	22	28	2	13	15	8	35	43		

	No. of				No.	of Participants				
Area of training	Courses		General			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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	1	31	13	44	12	5	17	48	18	61
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
Total	3	62	39	101	26	26	52	88	65	153

# 7.G. Sponsored training programmes conducted

		No. of Courses				N	o. of Participa	nts			
S.No.	Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Crop production and management	-	-	-	-	-	-	-	-	-	-
1.a.	Increasing production and productivity of crops	1	12	3	15	9	4	13	21	7	28
1.b.	Commercial production of vegetables	-	-	-	-	-	-	-	-	-	-
2	Production and value addition	-	-	-	-	-	-	-	-	-	-
2.a.	Fruit Plants	-	-	-	-	-	-	-	-	-	-
2.b.	Ornamental plants	-	-	-	-	-	-	-	-	-	-
2.c.	Spices crops	-	-	-	-	-	-	-	-	-	-
3.	Soil health and fertility management	2	16	7	23	8	4	12	24	11	35
4	Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
5	Methods of protective cultivation	-	-	-	-	-	-	-	-	-	-
6	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
7	Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
7.a.	Processing and value addition	-	-	-	-	-	-	-	-	-	-
7.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
8	Farm machinery	-	-	-	-	-	-	-	-	-	-
8.a.	Farm machinery, tools and implements	-	-	-	-	-	-	-	-	-	-
8.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
9.	Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
10	Livestock production and management	1	16	7	23	8	4	12	24	11	35
10.a.	Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
10.b.	Animal Disease Management	-	-	-	-	-	-	-	-	-	-
10.c	Fisheries Nutrition	-	-	-	-	-	-	-	-	-	-
10.d	Fisheries Management	-	-	-	-	-	-	-	-	-	-
10.e.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
11.	Home Science	-	-	-	-	-	-	-	-	-	-

11.a.	Household nutritional security	-	-	-	-	-	-	-	-	-	-
11.b.	Economic empowerment of women	-	-	-	-	-	-	-	-	-	-
11.c.	Drudgery reduction of women	-	-	-	-	-	-	-	-	-	-
11.d.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
12	Agricultural Extension	-	-	-	-	-	-	-	-	-	-
12.a.	CapacityBuilding and Group Dynamics	1	5	3	8	10	12	22	15	15	30
12.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
	Total	5	35	13	46	27	20	47	60	33	93

# Details of sponsoring agencies involved

- 1. CDB
- 2. MANAGE
- 3. ASCI

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

		No. of				N	o. of Participa	nts			
S.No.	Area of training	Courses		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	4	21	3	24	12	5	17	33	8	41
1.e.	Organic farming	1	16	6	20	8	6	14	24	12	36
1.f.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
2	Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
2.a.	Value addition	-	-	-	-	-	-	-	-	-	-
2.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
3.	Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
3.a.	Dairy farming	1	3	12	15	4	8	12	7	20	27
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	-	-	-	-	-	-	-	-	-	-

4.k.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
5	Agricultural Extension	-	-	-	-	-	-	-	-	-	-
5.a.	Capacity building and group dynamics	-	-	-	-	-	-	-	-	-	-
5.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
	Grand Total	3	40	21	59	24	19	33	64	40	94

## 7.F. Details of Skill Training Programmes carried out by KVKs under ASCI

C		Date	Date	Total				No. o	of Particij	pants				No of Participants
No.	Name of Job Role	of Start	of	Expenditure		General			SC/ST		G	Frand Tota	al	passed
110.		or start	Assessment	( <b>Rs.</b> )	Male	Female	Total	Male	Female	Total	Male	Female	Total	assessment
1	FoCT	11.02.19 to 07.03.19	02.04.2019	165400	12	-	12	8	-	8	20	-	20	-
2.	Coconut growers	06.03.19 to 30.03.19	02.04.2019	165400	11	9	20	-	-	-	11	9	20	-

## PART VIII – EXTENSION ACTIVITIES (2018-19)

## **Extension Programmes (including extension activities undertaken in FLD programmes)**

Nature of Extension Programme	No. of	No. of	Participants (G	eneral)	ľ	No. of Participan SC / ST	its	No.o	f extension pers	onnel
	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	6	180	27	207	30	10	40	15	5	20
Kisan Mela	-	-	-	-	-	-	-	-	-	-
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Exhibition	10	900	235	1135	110	40	150	30	20	50
Film Show	31	500	106	606	20	30	50	-	-	-
Method Demonstrations	25	200	109	309	120	61	181	3	2	5
Farmers Seminar										
Workshop	8	70	20	90	35	35	70	3	2	5
Group meetings	35	300	90	390	110	20	130	3	2	5
Lectures delivered as resource persons	67	1800	300	2100	250	100	350	300	57	357
Newspaper coverage	59	-	-	-	-	-	-	-	-	-
Radio talks	1	-	-	-	-	-	-	-	-	-
TV talks	1	-	-	-	-	-	-	-	-	-
Popular articles	6	-	-	-	-	-	-	-	-	-
Extension Literature	10	-	-	-	-	-	-	-	-	-
Advisory Services	981	800	181	981	30	20	50	11	10	21
Scientific visit to farmers field	86	500	202	702	50	20	70	10	5	15
Farmers visit to KVK	748	508	190	698	30	20	50	-	-	-
Diagnostic visits	26	230	50	280	5	5	10	-	-	-
Exposure visits	11	180	20	200	50	36	86	10	1	11
Ex-trainees Sammelan										

Nature of Extension Programme	No. of	No. o	f Participants (G	eneral)	ľ	No. of Participan SC / ST	ts	No.o	f extension pers	rsonnel	
- ·····	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Soil health Camp											
Animal Health Camp	9	590	20	610	35	35	70	-	-	-	
Agri mobile clinic	69	8100	210	8310	300	80	380	-	-	-	
Soil test campaigns	10	90	50	140	20	30	50	-	-	-	
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-	
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-	
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-		-	-	
Celebration of important days (specify)	-	-	-	-	-	-	-		-	-	
World coconut day	1	80	21	101	10	10	20	-	-	-	
National Nutrition week	7	250	40	290	15	15	30	-	-	-	
Organized group discussion meeting and taken oath on swaccha Bharath and cleaned office and hostel premises by the staff of KVK	1	12	4	17	-	-	-	-	-	-	
Planted environment friendly tree plants	1	3	2	05	-	-	-	-	-	-	
Organized awareness programme on Swaccha Bharath and conducted pick and speech on topics relates to clean environment	1	25	30	55	4	1	5	-	-	-	
Group discussion and distribution of Bio fertilizers to farmers as an encouragement who have maintained their farm cleanly under Karnataka Agriculture Price Commission sponsored Farmer Income and Welfare project	1	15	5	20	-	-	-	-	-	-	
Group discussion made on cleanliness and hygiene in Animal Husbandry and animal health camp was organized	1	40	30	70	-	-	-	-	-	-	
Awareness on Swacchata was delivered during Annual general body meeting of FPO members	1	140	30	170	20	13	33	-	-	-	
Organized awareness program on Swaccha Bharath in Megalaholagerahally of Turuvekere Taluk educated farmers on safety measures to be followed while spraying pesticides and hand washing and maintenance of hygienic conditions in homes and in their farms	1	30	10	40	-	-	-	-	-	-	
Cleaning of Coconut orchard of KVK farm by staff of KVK as a part of Swaccha Bharath Programme	1	15	10	25	-	-	-	-	-	-	
Planting of forest species plants along the border of KVK farm by staff of KVK as a part of Swaccha Bharath Programme	1	10	5	15	-	-	-	-	-	-	
Health and hygiene awareness programme as a part of Swaccha Bharath Programme and campaign in village street and distribution of dust bins for seperation of dry and wet kitchen	1	60	30	90	10	4	14	-	-	-	

Nature of Extension Programme	No. of	No. o	f Participants (G	eneral)	N	No. of Participar SC / ST	nts	No.o	of extension pers	onnel
	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total
waste										
Swacchata Hi Seva awareness programme	1	160	40	200	30	15	45	-	-	-
Importance of waste disposal in dairy farming	1	30	20	50	-	-	-	-	-	-
Awareness programme on Swacchata Hi Seva										
and cleaning of Ayurveda Hospital premises and planting of medicinal plants	1	15	5	20	-	-	-	-	-	-
Cleaning of farmers hostel mess and surroundings	1	5	2	7	-	-	-	-	-	-
Conduct door-to-door meetings to										
drive behaviour change with respect to sanitation behaviours	1	20	8	28	-	-	-	-	-	-
Wall painting at KVK building	1	18	2	20	-	-	-	-	-	-
Cleaning of public roads	1	10	5	15	-	-	-	-	-	-
Gandhi Jayanthi on 02.10.2018	1	30	8	38	-	-	-	-	-	-
Vigilance Awareness Week 2018	6	120	100	280	30	10	40	-	-	-
Soil Health Day	1	60	16	76	20	10	30	-	-	-
Cleaning of KVK Premises	1	20	10	30	4	4	8	-	-	-
Awareness programme and oath taking	1	25	5	30	-	-	-	-	-	-
Digitalization of KVK Documents	1	3	2	05	-	-	-	-	-	-
Awareness programme on cleanliness and hygiene	1	60	15	75	-	-	-	-	-	-
Awareness on waste management (House hold and farm )	1	20	10	30	-	-	-	-	-	-
Awareness on Swachhta Pakhwada for input dealers of Tumakuru district	1	30	15	45	-	-	-	-	-	-
Demonstration on enrichment of compost – Demonstration on agricultural technologies for conservation of waste to wealth	1	20	15	25	-	-	-	-	-	-
Celebration of Kissan day	1	100	87	187	-	-	-	-	-	-
Kissan Day	1	100	87	187	-	-	-	-	-	-
Cleanliness of surroundings community places – Bidaramma gudi temple	1	40	12	52	-	-	-	-	-	-
Creating awareness and cleanliness of public places – Schools	1	100	40	140	-	-	-	-	-	-
Establishment of library at adopted village – Pattrehalli and created awareness among farmers about swatchha bharath	1	10	3	13	-	-	-	-	-	-
Created awareness on importance of vermin composting	1	30	5	35	-	-	-	-	-	-
Training programme on waste management and its safe disposal	1	30	12	42	-	-	-	-	-	-
Cleanliness of KVK Garden	1	3	2	5	-	-	-	-	-	-
Interaction and video show on organic farming	1	10	2	12	-	-	-	-	-	_

Nature of Extension Programme	No. of	No. of	f Participants (Ge	eneral)	N	No. of Participan SC / ST	ts	No.o	f extension pers	onnel
_	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total
and usage of bio fuel										
DAESI certificate distribution programme	1	50	50	100	-	-	-	-	-	-
Celebration of Rabi and summer agriculture campaign	1	100	50	150	-	-	-	-	-	-
PM Kisan Samman Nidhi Scheme	1	50	9	59	-	-	-	-	-	-
Any Other (Specify)										
Total	2251	16897	2664	19612	1338	624	1962	385	104	489

## PART IX - PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIAL (2018-19)

## 9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Name of the Variety	Name of the Hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	-	-	-	-	-	-
Finger millet	Finger millet	MR- 6	-		•	
Little millet	Little millet	OLM- 203	-			
Haraka	Haraka	PSC- 1	-		Failure of crops due to drough	nt
Navane	Navane	/SIA- 326	-			
Oilseeds	-	-	-	-	-	-
Pulses	Redgram	BRG -1	-	5.5	-	-
Commercial crops	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others (specify)	-	-	-	-	-	-
Total	-	-	-	-	-	-

## 9.B. Production of planting material by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial	=	=	-	=	-	-

Vegetable seedlings	Chilli	Arka Meghana, Arka haritha, Arka Kyathi	-	15800	9480	20
	Tomato	Arka Rakshak	-	5000	2500	15
	Brinjal	Arka anand	-	600	300	5
	Drum stick	Bhagya, PKM-1	-	2600	26000	25
Fruits	Papaya	Surya, Prabatha, Redlady	-	3050	30500	20
Ornamental plants	-	-	-	-	-	-
Medicinal and Aromatic	-	-	=	-	-	-
Plantation	-	-	=	-	-	-
Spices	-	-	=	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others(specify)	-	-	-	-	-	-
Total				27050	68780	85

### 9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (q)	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	•	-	-	-
Bio-pesticide	•	-	-	-
Bio-fungicide	•	-	-	-
Bio Agents	•	-	-	-
Others (specify)	•	-	-	-
Total		-	-	-

### 9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows	HF	6 No., 3119 lt	68618	-
Buffaloes	-	-	-	-
Calves	-	-	-	-
Others (Pl. specify)	-	-	-	-
Poultry	Kadaknath	30	13500	-
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-
Emu	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
Piggery	-	-	-	-
Piglet	-	-	-	-
Others (Pl.specify)	-	-	-	-
Fisheries	-	-	-	-
Fingerlings	-	-	-	-
Others (Pl. specify) Sheep	Local	11	52750	-
Total		47	134868	-

PART X – PUBLICATIONS, SUCCESS STORY, INNOVATIVE METHODOLOGY, ITK, TECHNOLOGY WEEK

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

(A) KVK Newsletter:

Date of start: Jan 2018 Periodicity:6 months Copies printed in each issue: 500

#### (B) Literature developed/published

Item	Number
Research papers- International	4
Research papers- National	2
Technical reports	50
Technical bulletins	8
Popular articles - English	2
Popular articles – Local language	3
Extension literature	8
Others (Pl. specify) Folders	6
TOTAL	83

#### 10.B. Details of Electronic Media Produced

S. No.	Type of media	Title	Details
1	CD/DVD	-	-
2	Mobile Apps	-	-
3	Social media groups with KVK as Admin	What's app	180 members
4	Facebook account name	KVK Tumkur	-
5	Instagram account name	-	-

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. Chilli (Capsicum annuum L.) is an important spice crop cultivated all season of the year in Tumkuru district, which gives good returns to the farmers. Krishi Vigyan Kendra, Konehalli, Tiptur conducted frontline demonstrations at farmers' field during the year 2016-17. The main objective of frontline demonstration is to demonstrate newly released crop production and protection technologies and its management practices at the farmer's field under different agro-climatic regions and farming situations, and also convincing farmers and extension functionaries together about the chilli production technologies for further wide scale diffusion. Keeping in view of an effective extension approach of frontline demonstrations for dissemination of chilli production technology, its impact of FLDs conducted to be assessed.

### Title: Integrated crop management in green Chilli (Capsicum annuum L.)

**Background:** The frontline demonstrations were conducted on integrated crop management (ICM) in green chilli at farmer's field of Mr. Ramesh S. during the year 2016-17. Mr. Ramesh S. is a progressive farmers of Karikere village, aged 44 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.

# Technology intervention: Demonstrated package of practices and farmers practice for ICM in green chilli

Particulars	Frontline demonstration (Demonstrated package)	Farmers practice (Local check)
Selection of variety /hybrid	Arka Meghana – Hybrid variety, tolerance to sucking pest and viral disease	Local or unknown private variety, no information
Seed treatment	Seed treated with fungicide Carbendizim	Not followed
Pro-tray method of raising the	Pro-tray method of raised seedling in shadenet house with	Pro-tray method of raised seedling in shadenet
seedling in the nursery	Nylon mesh and selected good quality seedling	house and selected unknown poor quality seedling
Spacing	75 cm x 45 cm	75 cm x 60 cm
Application of farm yard manure	Applied 25 t/ha FYM before 3 week of transplanting	Applied 3 tractor load FYM (4-5 t/tractor load) during ridges and furrow preparation (2-3 day before transplanting)
Application of recommended dose	$150\ kg\ N + 75\ kg\ P_2O_5 + 75\ kg\ K_2O$ per ha ( $50\ \%$ NPK at the	After transplanting, applied 17:17:17 NPK +
of fertilizers	time of transplanting and remaining 50 % NPK applied at 6	20:20:0 NPK mixed chemical fertilizer (Approx.
	week after planting)	10-12 g/plant ) 3 – 4 times during crop period
Irrigation	Drip or furrow method of irrigation once in 3-5 days depend upon soil condition	Furrow method of irrigation once/twice in a week
Weed management	Pre-emergence herbicide - Butachlor @1.5 L/ha and hand weeding	Hand weeding 3 to 4 times
Use of growth regulator for control of flower drops	Sprayed with 50 ppm NAA (Planofix)	Not followed
Plant protection measures to control	Need based application for control: Aphids and Thrips –	Not followed, irrespective of disease and pest, used
pest and diseases	Sprayed Diamethoate (30 EC) @1.7 ml/L of water. Spayed Dicofol @ 2.5 ml/L of water at 7 <sup>th</sup> and 11 <sup>th</sup> week after transplanting for control of mites.  Control of powdery mildew - Hexaconazol @ 0.5ml/L of water. Fruit rot – Carbondizim @ 1 g/L of water.  Leaf curling – Imidaclopride @ 0.3 ml/L of water.	plant protection chemical combined together with growth regulator without knowing compatibility of chemicals and not identified pest and disease for spraying.

Particulars	Frontline demonstration (Demonstrated package)	Farmers practice (Local check)
Harvesting	Manual	Manual
Yield of Green chilli	23.75 t/ha	18.50 t/ha

#### Impact of ICM on yield of green chilli:

The information regarding the impact of integrated crop management on yield of green chilli through frontline demonstration are presented in Table. The data revealed that the increased in yield of green chilli per hectare by 28.38 percent in FLD plots. The yield of green chilli was significantly differences before and after conduct of FLD. It means that even after FLD, there was wider adoption of demonstrated technologies.

#### Yield of green chilli before and after frontline demonstration

Average yiel	Per cent increased in yield	
Before FLD	After FLD	
(Farmers practice)	(Demonstrated production)	
18.50 t/ha	23.75 t/ha	28.38

#### **Economics of green chilli production:**

The economic impact of demonstrated production practices of green chilli was worked out by calculating total cost of cultivation, gross return, net return and B:C ratio (BCR) of before and after frontline demonstrated plot. Total cost of cultivation was calculated by total sum of expenditure of land preparation, seed, manure and fertilizers, weeding, plant protection measures, irrigation, labour component and harvesting. The data revealed that yield of green chilli was obtained 18.50 t/ha before FLD and 23.75 t/ha after FLD. The farmers sold green chilli Rs. 1000 per quintal at farmer field and base on that profitability was calculated. Which shows that net returns Rs. 1,06,500/ha from green chilli before FLD, while the net returns Rs. 1,55,940/ha from green chilli after FLD. The B:C ratio for before FLD was 2.36, which was increased to 2.91 after FLD. It was evident from the results that B:C ratio of green chilli in FLD was higher than before FLD. This might be due to higher adoption of all the package of practices recommended for green chilli production in the region. However, increase in B:C ratio after FLD plot was due to adoption of production technology from 66.33 per cent to 93.33 per cent. This might be due to good extension contact by FLD farmers with the scientist and extension workers.

#### Economics of green chilli production before and after frontline demonstration

Sl. No.	Particular	Before FLD	After FLD
1.	Cost of cultivation (Rs/ha)	78,500	81,560
2.	Yield of green chilli (t/ha)	18.50	23.75
3.	Gross Return (Rs/ha)	1,85,000	2,37,500
4.	Net Return (Rs/ha)	1,06,500	1,55,940
5.	B:C ratio	2.36	2.91

Conclusion: The effective changing of farmers towards the adoption of integrated crop management in green chilli through frontline demonstration. The most of the farmers became aware about recommended package of practices for production of chilli crop after conducting the frontline demonstration at farmer's field. The more number of farmers were found to increased in adoption per cent of important package of practices such as use of growth regulator for control of flower drops, recommended spacing, plant protection measures to control pest and diseases, application of recommended fertilizer dose and selection of quality seedling from nursery after FLD as compare to before FLD. Yield of green chilli, net return and B:C ratio were found to increased in demonstrated plot as compared to farmers practice. The adoption of package of practices for production of green chilli even though after FLD programme, which shows positive impact of integrated crop management in green chilli through adoption of demonstrated technology. The concept of frontline demonstration may be applied to all farmers including progressive farmers for speedy and wider dissemination of the recommended practices to other members of the farming community.

### 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 5<sup>th</sup> 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 17<sup>th</sup> 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 5<sup>th</sup> 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: Processing and Branding of Tamarind Value added products

Background: Smt T.B. Parvatamma w/o Siddaramaiah aged 46 years from Eralager village, Kibbanahallihobli 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, 73ordeaux73 and packaging.

Training and method demonstration were conducted on preparation of 1 Kg and ½ 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 73ordeaux73 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, 74ordeaux74 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	40
		b. Palm climbers associations	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 *Goniozusnephantidis*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 76ordeaux 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	It facilitates intercultivation in both directions, conserves
_		spacing of 22.5 x 22.5cm	moisture, controls weeds and enhance tillering
			It ensures better moisture and nutrient supply and reduces
2	Ragi	Sowing seeds mixed with FYM	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
5	Arecanut	Application of Tank silt @ 50ton/ha	To control stem bleeding Supply nutrient to crop
3	Alecanut	Application of Talik Sitt & Soton/na	Supply nutrient to crop
6	Paddy	Calotropies(yekka) branches are placed at the	Acts as a insect repellent
		water inlet	
7	Coconut	Root feeding with neem oil	Reduce stem bleeding
8	Coconut	Planting kalli plants at the base of coconut	Reduce stem bleeding
0	Coconat	palm	Reduce stell bleeding
9	Darannial arons	Rag husk, coconut fronds and husk are used as	Check aromation and wood amounth
9	Perennial crops	mulch	Check evaporation and weed growth
10	Dadamam	Redgram is mixed with castor oil and stored in	Dhysical hamien to pasts
10	Redgram	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. Technology Week celebration during 2018-19: NIL

Period of observing Technology Week: From to

Total number of farmers visited : Total number of agencies involved :

Number of demonstrations visited by the farmers within KVK campus:

### Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-	-	-
Lectures organized	-	=	-
Exhibition	-	=	-
Film show	-	=	-
Fair	-	=	-
Farm Visit	-	=	-
Diagnostic Practicals	-	=	-
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	-	-	-

### PART XI – SOIL AND WATER TEST

### 11.1 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	02	43550
2	Conductivity bridge	01	7400

4	Chemical Balance		
	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
16	Epson L655 ink tank printer	01	29568
17	Dell inspiron computer	01	59708
18	Electronic balance	01	46080
19	Double distillation Unit	01	94663
20	Automatic absorption spectrophotometer (AAS)	01	2195540
	Water softner	01	15600
21	Computer, laptop and other accessories	01	180000
	TOTAL		Rs. 3006894
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	3	16,000
	with plywood top & compartments, size -8'x 3'		
c	Showcase boxes	2	11,000
d	61/2' x 3' Steel almirahs with glass fitted doors	4	27,450

	GRAND TOTAL		Rs. 3203784
	TOTAL		Rs. 1,96,890
r	Aluminum partition for the Laboratory	1	10,000
q	Extension cords	3	2400
p	Painting materials &labour charges (for painting laboratory & office rooms & wooden almirahs & tables)		3976
О	Hotplate (rectangular type) - 12' x 18'	1	10,800
n	40 mm slab for the construction of platform for placing the fume hood (including labour charges)		4269
m	3-phase power connection to fume wood for running the motor (including labour charges)		3377
1	Mesh work for laboratory rooms		1775
k	Exhaust fans	2	1688
j	Stools	5	1500
i	Steel rack	4	5848
h	S - type chairs	5	3263
g	Office tables Size- 3' x 5'	1	4725
f	Office tables Size- 2 1/2' x 4 1/2'	1	3994
e	61/2' x 3' Steel almirahs without glass fitted doors	4	22,950

# **B.** Under Recurring contingency:

Sl. No.	Particulars	Cost (Rs.)
1	Chemicals	44,695
2	Glassware	1,35,417
	Petty Items: Gas connection for spectrophotometer with stove and other accessories (1+1), Subble, Pick axe, Mumties, Bondless, Lock Covers, 35 mm	
3	locks, Stationeries, Plastic items, Cloth Bags, etc. List of Soil sampling augers and other laboratory accessories purchased: Soil Sampling augers, Standard	35,995
	Test Sieves, Mortar and Pestle, Burette Stand with Clamp, Spatula, Wash Bottles, Agate Mortar and Pestle, Gloves, Paper Tissue Roll, Bunsen Burners,	33,773
	Porcelain Crucible, Funnels, Reagent Bottles, Tongs, Burner Stands, Litmus Papers, pH Papers, Hamato Balance, etc	

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

### B. Details of samples analyzed since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	8455	8214	2553
Water Samples	7128	6862	2055
Plant samples	-	-	-
Manure samples	•	-	-
Others (specify)	-	-	-
Total	15583	15076	4608

### C. Details of samples analyzed during the 2018-19:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	654	570	260
Water Samples	516	480	228
Plant samples	-	-	-
Manure samples	-	-	-
Others (specify)	-	-	-
Total	1170	1050	488

### 11.2 Mobile Soil Testing Kit

### A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1.	28.03.2017	Not Working

### B. Details of soil samples analyzed during 2018-19 and since establishment with Mobile Soil Testing Kit:

	Progress during 2018-19	Cumulative progress
Samples analyzed (No.)	-	
Farmers benefited (No.)	-	-
Villages covered (No.)	-	

### 11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit during 2018-19:

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	-	260	572	654	654
<b>Mobile Soil Testing Kit</b>	-	-	-	-	-

### 11.4 World Soil Health Day celebration

Sl. No.	Farmers participated (No.)	Soil health cards issued (No.)	VIPs (MP/ Minister/MLA attended (No.)	Other Public Representatives participated	Officials participated (No.)	Media coverage (No.)
1	157	80	2	7	5	3

### PART XII. IMPACT

### 12.A. Impact of KVK activities (Not restricted for reporting period).

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in i	income (Rs.)	
rame of specific technology/skin transferred	No. of participants	% of adoption	Before (Rs./Unit)	After (Rs./Unit)	
Integrated crop management in green Chilli	10	7.5	1,06,500	1,55,940	
(Capsicum annuum L.)	10 75		B:C - 2.36	B:C - 2.91	
		80 1,44,620 2.37	1,44,620	2,20,480	
Integrated crop management in Tomato	20		3.15		
Assessment of Soil test based nutrient recommendations adopted by farmers of cluster villages of Tiptur Taluk, Tumkur district	289	60	Farmers were experienced decrease in cost of cultivation by 10-15% and increased crop yield by 15-20%.		
Community based Monitoring and management of Red palm weevil and Rhinoceros beetle in coconut through pheromone traps	995	92	Trapping and destruction of rhinoceros beetle througheromone traps resulted in the reduction of leaf a spindle damage by 22.5 and 55, respectively. Use pheromone trap for red palm weevil was found		

			effectively reduce the palm damage by 65% and 78% dead palms.			
Processing and Branding of Tamarind Value added products	2	40	1.000 B:C - 1.25	5.200 B:C - 2.08		

### 12.B. Cases of large scale adoption (Please furnish detailed information for each case with suitable photographs)

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

**Background** –Red palm weevil *Rhynchophorusferrugineus* 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, KrishiVigyan Kendra Konehally, Tumkur planned to manage the outbreak with the financial assistance from government of 83ordeaux83 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	BommalpuraGollarahatti	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.





### 12.C. Details of impact analysis of KVK activities carried out during the reporting period: --

### PART XIII - LINKAGES

### 13A. 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
State Department of Horticulture, Tumakuru Dist.	and field days 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
Zuari Industries Ltd. Tumakuru	Demonstrations and trainings
ORDER, NGO, Tumakuru	Conducting training and demonstration

### 13B. List of special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Linking of KVK to FPO for technical support	June 2018	Karnataka state horticulture department	3,09,750
NMSA	2016	GOK	37,50,000
Enhancement of Farmers Income and Welfare	2016	KAPC, GOK	25,00,000

### 1. Linking of KVK to FPO for technical support

Sl no	Name of FPO	Taluk	Name of KVK to which FPO is linked	Money drawn for FPO-KVK linkage (Rs. in lakhs)
	Linking of KVK to FPO for technical support -	Tiptur	KVK, Konehalli, Tiptur,	Rs. 3,09,750/-
1	Hemavathi Horticulture Farmers Producer Company Ltd.		Tumkur Didt.	(Amount received from DOH on
1	Thyagatur -572 223, Nittur Hobbli, Gubbi Taluk			25-05-2018)

### Conducted Frontline Demonstrations as Co-ordinator under Project Linking of KVK to FPO for Technical support during 2018-19

Cwang	Prioritized	Technology demonstrated	Hybrid /	Source of	No. of
Crops	problem	Technology demonstrated	Variety	Tech.	Demo

Coconut	Improper nutrient management, incidence of pest and disease and low returns	<ul> <li>Integrated Crop Management in Coconut</li> <li>Soil test based nutrient application</li> <li>Application of Neem cake @ 5 kg / palm/ year.</li> <li>Root feeding with Hexaconazole @ 3ml in 100ml water for control of Ganoderma wilt</li> <li>Use of pheromone traps for control of Red Palm weevil and Rhinoceros Beetle.</li> </ul>	Tiptur tall	CPCRI, Kasaragod	5 (0.2 ha / demo)
Arecanut	Poor soil fertility status, nut spitting and dropping, improper nutrient management and low returns	<ul> <li>Management of nut splitting and dropping in Arecanut</li> <li>Soil test based nutrient application 100:40:140 g NPK/palm/yr</li> <li>Application of boron 30 g/palm/yr and MOP 235 g/palm/year for control of nut dropping and splitting.</li> <li>Cowpea as green manures, which improve soil fertility status</li> </ul>	Gubbi local	CPCRI Kasaragod	5 (0.2 ha / demo)
Banana	Improper selection of quality sucker, sucker management, Poor nutrient management practices	Integrated Crop Management in Banana  Application of recommended dose of NPK 200:100:300 NPK g/pl (6 spilt doses)  Use of Banana special – 5 spray @5 g/lit  Leaving one sucker per plant  Bunch feeding (500 g fresh cow dung+ 100 ml water+ 10 g urea+ 10 g SOP)  Management of Rhizome weevil, Panama wilt and sigatoka disease	G-9	IIHR (B)	5 (0.2 ha / demo)

Date Title of training programmes	Place	No. of participants			
Date	True of training programmes	Place Ma		Female	Total
02-08-2018	Integrated crop management in Coconut	KVK, Konehalli	22	03	25

03-08-2018	Integrated crop management in Banana	KVK, Konehalli	21	04	25
11-08-2018	Improved production technology in Vegetables, Arecanut and Banana	Bommenahalli	31	12	42
09-07-2018	Improved production technology in coconut & arecanut	Thyagature, Gubbi tq	45	16	61

### Problematic farmers field /Diagnostic field visited

Date	Problematic farmers field	Place
24-05-2018	Banana. Coconut and drumstick	Nittur, Gubbi tq
09-06-2018	Banana. Coconut and tomato	Nittur, Gubbi tq
25-07-2018	Coconut and vegetables	Koddinagenahalli, Gubbi tq
09-11-2018	Flowers and Arecanut plot	Thyagature, Gubbi tq
04-12-2018	Banana. Coconut and tomato	Thyagature, Gubbi tq

### **Interstate Exposure Study Tour**

21<sup>st</sup> - 25<sup>th</sup> January 2019, 50 FPO member, 5 days interstate exposure study tour to KVK Mudigere, COH Mudigere, CPCRI Kidu, Dharmastala, Directorate of cashew research, Puttur, Campco Puttur, CPCRI Vittla, KVK Mangaluru, CPCRI Kasaragoda, KVK Kannur, RARS Pillikoda, KVK Gonikoppa, JSS KVK Mysore, KVK Mandya

### 2. Details of NMSA projects operated

ABAC No.	Funding agency	Title of the Project	Objectives	PI / Co-PI	Duration (years)	Year of start	Year of Completion	Total budget outlay (Rs. in lakhs)	Sanctioned	Total Expenditure (Rs. in lakhs)	Balance available (Rs. in lakhs)	Significant Research outcome
8847		Strengthening of Soil Testing Laboratories (NMSA)	_	PI- Dr. Govindagowda Co-PI- Dr. Anitha M S	3 years	2016	During 2019- 2020 (Status:On- going)	37,50,000	30,00,000/- sanctioned during 1-09-2017 and 7,50,000 during 16-01-2018	27,55,329/-		Got facility to test soil and water samples, Infrastructure development of the soil testing laboratory and help to study an impact of application of fertilizer, based on soil test results at farmers field

# List of Infrastructure and Assets created through NMSA Project

AB AC No.	Name of the Project	Year of Purchase/ Sanction	Infrastructure & assets created				
AD AC NO.	Name of the Project	Teal of Furchase/ Sanction	Particulars (Rs.)  Digital pH meter 35,000/-  Digital Conductivity meter 25,000/-				
	NMSA- Strengthening	2017-18	Digital pH meter	35,000/-			
		2017-18	Digital Conductivity meter	25,000/-			
	NMSA- Strengthening	2017-18	Chemical balance	50,000/-			
8847	of Soil Testing	2018-19	Double distillation Unit	94,663/-			
	Laboratories (NMSA)	2018-19	Automatic absorption spectrophotometer (AAS)	21,95,540/-			
		2018-19	Water softner	15,600/-			
		2018-19	Computer, laptop and other accessories	180,000/-			

# 3. KAPC Project activities

### Various activities undertaken under KAPC-FIW PROJECT

Sl. no.	ACTIVITIES	DATE
1.	Participated in the state level workshop at Kalburgi on Rural Hygiene, basic necessities and social issue improvement necessary for enhancement of farmers income and welfare (Kalburgi)	02.03.2018 to 03.03.2018
2.	Participated in the national workshop on making organic minor millets agriculture as sustainable source of income for increasing farmers income and welfare	06.03.2018 to 07.03.2018
3.	Gramsabha	16.05.2018
4.	KAPC- Farmers Income and welfare project progress review meet	08.06.2018 to 09.06.2018
5.	Skill development training on processing and value addition in Jackfruit	28.06.2018
6.	National workshop on strengthening of profitable price and purchase system for farmers produce	26.07.2018
7.	Gramsabha	21.08.2018
8.	World coconut day Workshop and scientist farmers interaction	03.09.2018
9.	Distribution of critical inputs to FLD selected farmers and scientist farmers interaction	18.09.2018
10.	Health and hygiene awareness programme	26.09.2018
11.	KAPC- Farmers Income and welfare project progress review meet	03.10.2018
12.	Demonstration and training programme on coconut and arecanut FLD	13.10.2018
13.	Training programme on integrated pest and disease management in Coconut	03.11.2018
14.	Gramasabha	20.12.2018
15.	Telecasting of video on preparation of liquid bio fertilizers and biofuel.	31.12.2018
16.	Telecasting of video on integrated pest management in coconut	03.01.2019
17.	KAPC- Farmers Income and welfare project progress review meet at the Honorable DC office	07.01.2019
18.	Telecasting of video on progressive farmer on IFS of Mr. Arunkumar Shettikere	09.01.2019
19.	Exposure visit V C farm Mandya and Loksara	08.02.2019
20.	Distribution of Inputs under FLD	20.02.2019
21.	Training Programme on Vermicomposting	21.03.2019

# 1.FLDs under KAPC-FIW Project

### 1.1 Integrated crop management in Ragi, Little millet & Foxtail millet

Crop & Name of the technology	Area (ha.)	Total No. of	Source of the	Technology details	Yiel	ld(q/ha)	% increase in
		Demo	technology		FLD	Check	yield
Integrated crop management in Ragi	1.2	3	UAS, (B)	<ul> <li>Use of neck &amp; finger blast tolerant variety (ML-365)</li> <li>Use of Biofertilizer-PSB</li> <li>Micronutrients (ZnSO4 10 kg/ha)</li> <li>Intercropping with pigeon pea (8:2)</li> <li>Need based plant protection</li> </ul>		Due to failure of rainfall implements	
Integrated Crop Management in Foxtail millet	1.2	3	UAS, (B)	<ul> <li>Introduction of variety SIA-326</li> <li>ICM practices</li> <li>Processing, value addition and marketing</li> </ul>	Due to failure of rainfall implementatio FLD was not successful		mplementation of
Integrated crop management & Value addition in Little millet (Saame)	1.2	3	UAS, (B)	<ul> <li>Improved variety OLM 203</li> <li>Micro nutrient management – use of Zinc @ 12.5 kg / ha and boron @ 5 kg / ha</li> <li>Preparation of value added Little millet products</li> </ul>	Due to failure of rainfall implementation of FLD was not successful		

# Details of Critical inputs distributed to beneficiaries Integrated crop management in Ragi, Little millet & Foxtail millet

Sl.no.	Name	Category	Crop	Area (ha.)	Ragi seeds (Kg)	Little millet seeds (Kg)	Foxtail millet	Redgram seeds	Zinx sulphate	Borax (Kg)
				` ,			seeds (Kg)	( <b>Kg</b> )	(Kg)	
1	Ranganath S/o	OBC	Ragi	0.4	5			3.33	5	
	Shekarayya		Foxtail millet	0.4			4			
			Little millet	0.4		5			5	6
			Total	1.2	5	5	4	3.33	10	6
2	Kumar.H.M S/o	OBC	Ragi	0.4	5			3.33	5	
	Mahalingappa		Foxtail millet	0.4			4			
			Little millet	0.4		5			5	6
			Total	1.2	5	5	4	3.33	10	6
3	Ranjith S/o	OBC	Ragi	0.4	5			3.33	5	
	Mahadevayya		Foxtail millet	0.4			4			
			Little millet	0.4		5			5	6
			Total	1.2	5	5	4	3.33	10	6
	·	·	7	otal inputs	15	15	12	10	30	18

### 1.2 Technology Capsules for Sustainable Production in Coconut

Crop & Name of the	Area	Total No.	Source of the	Technology details	Yield(q/ha)	% increase in
					T	

technology	(ha.)	of Demo	technology		FLD	Check	yield
Technology Capsules	4.4	18	UAS (B) / CPCRI,	Integrated Crop Management in Coconut		Under pro	gress
for Sustainable			Kasargood	Soil test based nutrient application			
Production in				French bean as intercrop (leguminaceae) in coconut garden for additional			
Coconut				income and also improve the soil nutrient.			
				Application of Neem cake @ 5 kg each / palm/ year.			
				➤ Burial of coconut husk with convex husk splits facing upwards in 2-3 layers			
				and soil surface mulching with dried coconut leaves for soil moisture			
				conversation.			
				➤ Root feeding with Hexaconazole @ 3ml in 100ml water for control of			
				Ganoderma wilt			
				Use of pheromone traps for control of Red Palm weevil and Rhinoceros			
				Beetle.			

### Details of Critical inputs distributed to beneficiaries for Technology Capsules for Sustainable Production in Coconut

			Crop	Area	Critical inputs details							
Sl. No.	Name	Category		(ha.)	Potash (Kg)	Borax (Kg)	Neem cake (Kg)	Pseudomonas (Kg)	Trichoderma (Kg)	Hexaconozole (Ltr)	French bean (Kg)	
1	K. T.Nagaraju S/O Thimmayya, K.	SC	Coconut	0.4	100	2.5	250	5	5	1	8	
2	Shanta Kumar S/O Halaveeregowda	OBC	Coconut	0.4	100	2.5	250	5	5	1	8	
3	Indresh S/O Shivakumar	OBC	Coconut	0.4	100	2.5	250	5	5	1	8	
4	Arun H.D S/O Devaraju H	OBC	Coconut	0.4	100	2.5	250	5	5	1	8	
5	Vedavathi W/O Chandrakant H	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
6	H.V. Roopa W/O Rajashekar H	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
7	Lohith S/O Rajeshwara H	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
8	Nikil s/o Mahadevaiah H	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
9	H.G. Prashanth S/O Gangadaraiah H	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
10	Kumar.H.M S/O Mahalingappa H	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
11	Shashikala.H W/O T. Krishnamurthy K	SC	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
12	K.S. Madhu s/o Somashekar K	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
13	Vinay K.S s/o Somashekar K	OBC	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
14	Thimmegowda S/O Haralappa K	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
15	Rangaswamy s/o Narayanappa	SC	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
16	Ranjith S/O Mahadevaiah K	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
17	Nagesh. K.P s/o Prabhuswamy K	SC	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	
18	Ranganath s/o Shekaraiah K	Gen	Coconut	0.2	50	1.25	125	2.5	2.5	0.5	4	

Total	4.4	1100	27.5	2750	55	55	11	88

### 1.3 Integrated crop management in Arecanut

Crop & Name of the technology	Area (ha.)	Total No. of Demo	Source of the technology	Technology details	Yield(q/ha)		% increase in yield
					FLD	Check	
Integrated crop management in Arecanut	0.8	4	CPCRI Kasaragood	<ul> <li>Integrated crop management in Arecanut</li> <li>Soil test based nutrient application 100:40:140 g NPK/palm/yr</li> <li>Application of boron 30 g/palm/yr and MOP 235 g/palm/year for control of nut dropping and splitting.</li> <li>Soil application of Neem cake @ 3 kg + Trichoderma 100g each / palm/ year</li> <li>Cowpea as green manures, which improve soil fertility status</li> </ul>	Under progress		

### Place : Hullukate-Koppa

### Details of Critical inputs distributed to beneficiaries for Integrated crop management in Arecanut

				A ====	Critical inputs details				
Sl No	Name	Category	Corp	Area ( ha)	Potash (kg)	Borax (kg)	Neem cake (kg)	Traicoderma (kg)	Cowpea seeds (kg)
1	P. S.Lokesh S/O Shivaswami, K.	OBC	Arecanut	0.2	66.6	9.33	400	14	5
2	Prakash S/O Vishwanath	OBC	Arecanut	0.2	66.7	9.33	400	14	5
3	Madhukar S/O Marilingayya	OBC	Arecanut	0.2	66.7	9.33	400	14	5
4	H.G. Manjunath S/O Gurusiddappa H	OBC	Arecanut	0.2	66.7	9.33	400	14	5
Total				0.8	266.8	37.33	1600	56	20

### 1.4 Poultry farming

Crop & Name of the technology	Total No. of Demo	Source of the technology	Technology details	Yield(q/ha)		% increase in yield
				FLD	Check	
Poultry farming	2	KVK, Kandli	Popularizing the new breed among farming community along with income generation and health benefits to farmers		Under progi	ress

Sl. no	Name	Category	Crtitical inputs details		
			Khadaknath hen with feeds	Rearing cage (5*2.5*2 ft)	
1	Raghu. K.S s/o Sundarmurty K	SC	10	1	

2 Manjunatha.K.R s/o Ramaiah K	SC	10	1
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### Other inputs distributed to farmers under KAPC-FIW Project

Farmers information kit distribution	100			
total number of beneficiaries	100			
Farmers information kit contains	1. PM ON AV WEAT UAJ PE MUMA DZMOPH BAAAIM ¥EWUMA ¥AJPN 2. VAVER EJPMUMO ON BOULUE GEVIJM CEMJJJA MAUDJAEAUMM OMAN W ¥ME 3. Crpaimo njpmumo njoo lulue gevijm Cemjja mando jeaummo oman imano oman water oman njemumo oman oman oman oman oman oman oman om			
Vermi-compost units distribution				
Mobile vermi compost beds	10 numbers (10*3*1.5 ft)			
Earthworms	1 Kg per farmer			

### **Budget details of KAPC-FIW PROJECT**

Budget (Rs.)	Expenditure (Rs.)	Balance (Rs.)
(from 2017-18 to 2018-19)	(from 2017-18 to 2018-19)	(from 2017-18 to 2018-19)
25,00,000	22,24,021	2,75,979

### 13C. Details of linkage with ATMA

### Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	Taluk and district level technical advisory committee	5	-	-
02	Research projects	-	-	-	-
		-	-	-	-
03	Training programmes	Improved production particles in field and horticulture crops	7	2	-
04	Demonstrations	Seed treatment, IPDM etc.	8	3	-
05	<b>Extension Programmes</b>	-	-	-	-
	Kisan Mela	-	5	2	-

	Technology Week	-	-	-	-
	Exposure visit	-	-	-	-
	Exhibition	-	-	-	-
	Soil health camps	World soil day	3	1	-
	Animal Health Campaigns	Animal health camps	3	2	-
	Others (Pl. specify)	-	-	-	-
06	Publications	-	-	-	-
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	Improved production particles in			Distributed to department and
		field and horticulture crops			farmers
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	Other Activities (Pl.specify)	-	-	-	-
	Watershed approach	-	-	-	-
	Integrated Farm Development	-	-	-	-
_	Agri-preneurs development	-	-	-	-

### 13D. 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
-	•	-	-	-	-

13E. Nature of linkage with National Fisheries Development Board

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

13F. Details of linkage with RKVY

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

### 13G. Kisan Mobile Advisory Services

Month	Message type			SMS/voic	e calls sent (No.)			Total	Farmers
	(Text/Voice)	Crop	Livestock	Weather	Marketing	Awareness	Other enterprises	SMS/Voice calls sent (No.)	benefitted (No.)
April 2018	Text	0	0	0	0	1	1	2	4950
May	Text	2	1	0	0	0	0	3	4950
June	Text	2	1	0	0	0	0	3	4950
July	Text	1	0	0	0	4	0	5	4950
August	Text	1	0	0	0	6	0	7	4950
September	Text	1	0	0	0	4	0	5	4950
October	Text	2	0	0	0	6	1	9	8329
November	Text	1	0	0	0	6	0	7	8329
December	Text	1	0	0	0	4	0	5	8329
January 2019	Text	1	0	0	0	5	0	6	8329
February	Text	1	0	0	0	6	2	9	8329
March	Text	1	0	0	2	5	0	8	8329
To	otal	14	2	0	2	47	4	69	8329

### PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

### 14A. Performance of demonstration units (other than instructional farm)

		Year of	Area	Details of production			Amour		
Sl. No.	No. Demo Unit establishment		(ha)	Variety	Produce	Qty.	Cost of inputs	Gross income	Remarks
-	-	-	-	-	-	-	-	-	-

### 14B. Performance of instructional farm (Crops) including seed production

Nama	Name Date of		ea a)	Details of	production		Amour	nt (Rs.)	
of the crop	sowing	Date of harvest	Are (ha	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
Cereals	-	-	-	-	-	-	-	-	-
Finger millet	-	-	-	MR- 6					-
Little millet	-	-	-	OLM- 203		Foilum	e of crops due to drough		-
Haraka	-	-	-	PSC- 1		-			
Navane	-	-	-	SIA- 326		-			

Pulses	_	-	_	-	-	-	-	-	_
Redgram	-	-	-	BRG -1	-	5.5	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fibers	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Spices & Plantation of	crops								
Floriculture	-	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-	-
Chilli	-	-	-	Arka Meghana, Arka haritha, Arka Kyathi	-	15800	-	9480	-
Tomato	-	-	-	Arka Rakshak	-	5000	-	2500	-
Brinjal	-	-	-	Arka anand	-	600	-	300	-
Drum stick	-	-	-	Bhagya, PKM-1	-	2600	-	26000	-
Fruits	-	-	-	-	-	-	-	=	=
Papaya	-	-		Surya, Prabatha, Redlady	-	3050	-	30500	-
Others (specify)			•	•	•				•
	-	=	-	-	-	-	=	-	-
	-	=	-	-	-	-	=	-	-

### 14C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

S1.			Amou	D 1	
No.	Name of the Product	Qty	Cost of inputs	Gross income	Remarks
-	1	1	-	-	-
=	=	-	-	-	-

### 14D. Performance of instructional farm (livestock and fisheries production)

Sl.	Name	D	etails of production		Amou	nt (Rs.)	
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
1	Dairy (No. 6)	HF	Milk	3119	21120	68618	-
2	Sheep	Local	-	11	22000	52750	-
3	Poultry	Kadaknath	Meat	30	7000	=	waiting for harvest

### 14E. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2018	20	20	-
May	15	15	
June	-	-	
July	21	21	
August	20	20	
September	40	40	
October	30	30	
November	-	-	
December	30	30	
January 2019	21	21	
February	40	40	
March	20	20	

### 14F. Database management

S.No	Particulars	Database target	Database created	
1	OFT Farmers	15	15	
2	FLD Farmers	140	140	
3	Farmers visit to KVK	3000	4200	
4	Technical reports	40	55	
6	Salary of staff	12 months	12 months	

### 14G. Details on Rain Water Harvesting Structure and micro-irrigation system

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

### PART XV - FINANCIAL PERFORMANCE

### 15A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account	Account	MICR	IFSC Number
				Name	Number	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
DAESI	Canara Bank	Tiptur	699	SB	0699101037387	572015202	CNRB0000699
KAPC Project	Canara Bank	Tiptur	699	SB	0699101037720	572015202	CNRB0000699

### 15B. Utilization of KVK funds during the year 2018-2019(Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
	ecurring Contingencies			
1	Pay & Allowances	100.75	100.75	90.50
2	Traveling allowances	1.75	1.75	1.75
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.04	2.04	2.04
В	POL, repair of vehicles, tractor and equipments	1.85	1.85	1.85
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.15	1.15	1.15
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.50	0.50	0.50
Ε	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.86	2.86	2.86
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.62	0.62	0.62
G	Training of extension functionaries	0.25	0.25	0.25
Н	Maintenance of buildings	0.50	0.50	0.50
I	Establishment of Soil, Plant & Water Testing Laboratory	0.25	0.25	0.25
J	Library	0.10	0.10	0.10
K	Extension activity	0.50	0.50	0.50
L	FFS	0.30	0.30	0.30
M	EDP	0.25	0.25	0.25
	TOTAL (A)			
B. N	on-Recurring Contingencies	113.67	113.67	103.42
1	Works	-	-	-
2	Equipments including SWTL & Furniture	-	-	-
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)	-	-	-
TOT	AL (B)	-	-	-
C. R	EVOLVING FUND	-	-	-
CD	ND TOTAL (A+B+C)	113.67	113.67	103.42

### 15C. Status of revolving fund (Rs. in lakh) for the last three years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2016 to March 2017	831732	907905	670171	1069466
April 2017 to March 2018	1069466	725256	795327	999395
April 2018 to March 2019	999395	1331850	1854274	476971

### 16. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. K.R. Shreenivasa	Scientist (Plant Protection)	IPDM in coconut	CPCRI, Kasargud	4/24/2018 4/28/2018
Dr. Govinda Gowda v.	Senior scientist & Head	Managerial development programme (Phase II)	Prakasam KVK, Karimnagara, Telangana	12/21/2018 12/31/2018
Dr. Govinda Gowda v.	Senior scientist & Head	Managerial development programme (Phase I)	NAARM, Hyderabad	12/4/2018 12/18/2018
Dr. Anitha M S	Scientist (Soil Science)	Developing winning project proposals in agriculture research	STU, Hebbal	12/26/2018 12/28/2018
Dr. Govinda Gowda v.	Senior scientist & Head	Managerial development programme (Phase III)	ATARI, Zone XII, Bangalore	1/4/2019 1/8/2019
Dr. K.R. Shreenivasa	Scientist (Plant Protection)	Climate change resilient agriculture	UAHS, Shimoga	1/21/2019 1/25/2019
Dr. Anitha M S	Scientist (Soil Science)	Induction training programme	STU, Hebbal	1/21/2019 1/25/2019

17. Please include any other important and relevant information which has not been reflected above (write in detail).

### **FARMER FIELD SCHOOL:**

Title of the FFS	Thematic area
Integrated pest and disease management in Banana (Puttabale)	Plant protection & ICM

### Learning processed

- Banana growers/farmers has learnt about the IPDM & ICM approaches by actively involving from planting to marketing stage.
- The participants has taken ICM practices such as application of recommended
- dose of NPK 180:108:225 NPK g/pl (three spilt doses), Use of Banana special 5
- spray @ 5 g/lit., Leaving one sucker per plant (More than 2 sucker in FP),
- Bunch feeding (500 g fresh cow dung+ 100 ml water+ 2.5 g urea+ 2.5 g SOP) and
- IPDM practices followed: selection of disease and pest free suckers, Sucker
- treatment, management of Rhizome weevil, Panama wilt and sigatoka disease.

### **Training Session: Training programme**

Date	Title of training programmes	Place	Total
20-06-2018	Sucker selection, water and nutrient management in Banana	Nagathihalli	25
10-07-2018	Integrated nutrient and sucker management in Banana	Nagathihalli	32
29-9-2018	Intercrop and disease management in Banana	Nagathihalli	25
21-12-2019	Integrated water and pest management in Banana	Nagathihalli	25
28-02-2019	Demonstration of banana special application and micronutrient management in Banana	Nagathihalli	31
07-03-2019	Demonstration of banana bunch feeding and field visit	Nagathihalli	26

Sl. No.	Parameters	Check	Demo	
1	Plant height		<u> </u>	
2	No. of Fruits / bunch			
3	No. of Fruits / plant	Fruiting stage,		
4	Fruit weight (g)			
5	Disease affected (%)	Under progress		
6	Insect affected (%)			
7	Yield (q/ha)			

### KVK Outlet -

**Started:** 15.08.2018

Particular	Quantity sold	Price (Rs.)	Amount realized (Rs.)
Trichoderma	95 kg	120	11400
Psudomonas	80 kg	120	9600
AMC	22 kg	120	2640
Waste decomposer	30 kg	135	4050
Honey	120 lt.	250/lt	30000
Banana Special	55 kg	160	8800
Vegetable special	48 kg	160	7680
Pickle	03 kg	200	600
Drumstick seeds (PKM 1)	1.8 kg	2000	3600
Drumstick seeds (Bagya)	250 g	2000	500
Mango harvester	2	500	1000
Fodder seeds	115 kg	450	51750
Vegetable kit	14	30	420
Virgin coconut oil	3 lt	500	1500
Ragi malt	12.5	170	2176
Books on agriculture technologies in kannada	60	1890	4115
Total			139831

# Minor millet processing unit

**Started**: 25.03.2019

Sl. No.	Сгор	Quantity processed (kg)	Amount realized
1	Ragi	170	120
2	Saame	694	3470
3	Haraka	585	2925
4	Navane	235	1175
5	Korale	20	100
	Total	1704	7790