



UNIVERSITY OF HORTICULTURAL SCIENCES, BAGALKOT



ANNUAL PROGRESS REPORT

(JANUARY 2020 TO DECEMBER 2020)



**ICAR- KRISHI VIGYAN KENDRA
KOLAR (KARNATAKA)**

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

S. No.	Item	Area (ha)
1.	Under Buildings	550 m ²
2.	Under Demonstration Units	0.06
3.	Under Crops	1.12
4.	Orchard/Agro-forestry	2.0
5.	Others	12.82

1.7. Infrastructural Development:**A) Buildings**

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building							
2.	Farmers Hostel							
3.	Staff Quarters							
	1							
	2							
	3							
	4							
	5							
	6							
4.	Demonstration Units							
	1. Farm pond	GOK	-	15x15x9 m	2,50,000			
	2. Curry leaf block	ICAR	-	100	-			
	3.Low cost poly house 1	ICAR	-	216	3,68,185			
	4.Poly tunnels 4	ICAR	-	400				
	5.Jackfruit processing unit	ICAR	-	10	3,95,265			
	6.Hydroponic fodder unit	ICAR	-	4x2 sq.ft	30000			
5	Fencing							
6	Rain Water harvesting system							
7	Threshing floor							
8	Farm godown							
9								
10								

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero ZLX (Four Wheeler)	12/06/2014	663706	147378	Running
Hero splendor (Two Wheeler)	12/05/2013	54600	18280	Running
Honda Activa (Two Wheeler)	31/12/2013	61345	16503	Running

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Vegetable preservator	2014	3000	Good
Sealing machine	2014	1700	Good
Gas cylinder and stove	2014	5857	Good
Mixer and juicer	2014	4200	Good
Micro Oven	2014	5800	Good
Pressure cooker	2014	1400	Good

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Electronic balance (6 kg)	2016	6646	Good
Weighing balance (60 kg)	2016	9495	Good
Vegetable Handy Planter	2016	2000	Good
Branded Heavy duty load bearing cabinet (Steel Almirah)	2016	14470	Good
Branded carware brand caned seating ('S' type full arm chair)	2016	2445	Good
Knock down Type seating (Wooden peacock chair)	2016	4567	Good
Branded Indexed Cabinet 4 Drawer filing cabinet with 100 CFF(Filing cabinet)	2016	17458	Good
Branded officers Desk (T-9 Table) with 18 mm PLB Top	2016	12033	Good
Jack Fruit Chips machine	2016	8800	Good
Nikon D5300 (with free gb card + carry case +HDMI cable)	2016	34800	Good
Sealing Machine	2017	1000	Good
ISI A,, "Taypcerana Bee hive Box	2017	17600	Good
Branded 12 Pigeons Wooden magazine display cabinet	2017	24390	Good
Steel Book case	2017	14470	Good
Branded officers steel table	2017	11877	Good
Remote calling bell	2017	400	Good
Dell Desktop system	2017	36500	Good
Canon Printer LBP 2900	2017	7800	Good
Hydroponic system unit(1)(72 tray)	2017	30000	Good
Soil sampling Augur set	2017	19980	Good
Executive Revolving chair	2017	12159	Good
Executive table	2017	16299	Good
Officers Revolving chair	2017	58212	Good
Pulp boiling machine	2017	94447	Good
Conventional pulp making machine	2017	54500	Good
Pulp making machine all contact parts made of food grade 304 SSsteel	2017	31700	Good
Digital Hand held refractometer for invert sugar	2017	27000	Good
Digital PH meter make: systronics india Mode 335	2017	14500	Good
Racks 6 ft (8 Angle & 6 Plates)	2017	3600	Good
Toshiba e -studio xerox machine	2017	86000	Good
Acer Desktop Computer	2017	99900	Good
Mridaparikshak soil testing Kit(Mini lab)	2017	86000	Good
Logitech webcam	2017	900	Good
Logitech R400 Presenter	2017	3120	Good
Logitech Mouse wireless	2017	700	Good
Flame photometer	2017	73758	Good
Hand operated cocoon deflossing machine	2017	8000	Good
Water bath circulator	2017	88500	Good
Analytical Balance	2017	67850	Good
EC meter	2017	98530	Good
Kjeldahl apparatus	2017	215800	Good
AAS unit	2017	1489000	Good
Double distillation unit	2017	167000	Good
CC Camera	2017	34700	Good
Desk top	2017	47800	Good
All in one Printer	2017	18000	Good
Epson LCD Projector	2018	44000	Good
Mango Ripening chamber	2019	10620	Good
Solar LED insect light trap	2019	3780	Good
Hydraulic Juice(KSDH)	2019	94,000	Good
Amla shredding machine(KSDH)	2019	72,000	Good
Boiled amla shredding	2019	72200	Good
Officers table both side 3 drawers of size(IMD)	2019	24120	Good
S type full A/c chair(IMD)	2019	5220	Good
Heavy guage steel plain almirah	2019	15039	Good
Laptop(Dell)	2020	44500	Good
Desktop(Dell)	2020	35600	Good
Hard Disk	2020	7434	Good

1.8. Details of SAC meeting conducted during 2020

Sl. No.	Suggestions
The Honorable Vice Chancellor, UHS, Bagalkot	
1	Due to Covid-19 Pandemic, Honorable VC suggested to conduct virtual training programs to farmers.
2	When crop specific training programmes conducted in any of the campuses of UHS, Bagalkot the information should reach Kolar district farmers also.
3	Present vacancies in the Krishi Vigyan Kendra, i. e posts of Scientist (Animal Husbandry-1), Program Assistant (Laboratory) - 1, Driver-2, Supporting Staff-2 will be recruited soon.
4	Once in a month to calculate the budget required and use the funds efficiently.
5	To conduct scientific advisory committee meeting once in a year regularly.
Dr. Y.K. Kotikal, Director of Extension, UHS, Bagalkot	
6	Encourage the farmers to grow perennial horticultural crops viz., Cashew, Guava, Jamun in place of Eucalyptus.
7	Recommended to create awareness among farmers to use more of Bio-fertilizers, Mango special, vegetable special etc.
8	To increase productivity encourage the farmers to adopt protected cultivation and also give training programmes for Horticultural department beneficiary.
Dr. M.J.Chandregowda, Director, ATARI, Zone-11, Bengaluru	
9	To create awareness among farmers on On-farm production of enriched compost and various bio products.
10	To conduct training on protected cultivation for Department officials in collaboration with Dr. Hebbar, IIHR, Bangalore.
11	In future, conduct the front line demonstration on Rose Onion in Malur and Srinivasapur Taluks of the district in collaboration with APEDA.
12	While Conducting Entrepreneurial training programmers, collaborate with Lead Bank representative.
13	In Hobli level conduct training programmes for farmers and Input dealers regarding plant protection measures.
14	To conduct OFT on use of mango special in Cashew crop during the flowering and Fruit setting stage.
15	To study the impact of technologies which demonstrated on use of traps in management of Uzi fly in sericulture, mango special, waste decomposer and Diamond back moth management.
Dr. Byregowda, Director of Extension, UAS, Bengaluru	
16	Provide information to farmers regarding market forecast of tomato price.
17	Provide information at right time regarding different market channels for various commodities.
Dr. T.B. Basavaraju, Associate Director of Extension (S), UHS, Bagalkot	
18	The amount of phosphorus in the soil has been found to be more than 150 kg but red soil contains less (less than > 50 kg) of phosphorus. So test the range of phosphorus which is present in soil.
19	To develop natural ripening practices for mango (Paddy grass, Ragi grass or hill grass).
Dr. Vishnuvardhan, Associate Director of Research, RHREC, Bengaluru	
20	The Mango Special can be recommended for the Cashew crop at the flower and nut stage after conducting of OFT.
21	Impact analysis of demonstration and how many are following to be carried out
22	To Provide direct market channels for various products.
Dr. Raghavendra, ADA, Department of Agriculture, Kolar	
23	Suggested to create awareness on use of certified bioagents instead of use of fake bio products which led to adverse effect on soil and consumers. Information is disseminated to DAESI trainees (Input dealers) about genuine bioagents and ill effects of spurious bioagents
24	To create awareness on use of compost and Jeevamrutha.
Shri Manjunath, ADH, Department of Horticulture, Kolar	
25	In recent past, the area under protected cultivation is increasing day by day. So suggested to create awareness on alternative crops which can be grown in the protected cultivation through demonstration instead of leafy vegetables, cucumbers and capsicum.
26	Farmers are using the local cultivars of rose onions and requested to provide information on improved varieties.
Shri Hosamata, Lead Bank (Canara bank), Kolar	
27	Suggested to invite Lead bank representatives for vocational trainings conducted by Krishi Vigyan Kendra, which will be helpful to farmers to know about the facilities available at the bank.
Shri. K.M Rajanna, Krishnapura, Ammanalluru Hobli, Kolar	
28	Suggested to horticultural department officials to visit once in a week at gram panchayat level to educate farmer on right use of pesticides.
29	To give forecast to farmers regarding crop area via message.
Shri. N.R. Chandrashekar, Holur, Kolar	
30	There is a need to educate the farmers on the use of bio-pesticides and also requested to use only recommended chemicals as advised by scientists of KVK/ officers of Department of Agriculture / Horticulture.
31	Suggested Scientists to visit the farmer's field on regular basis to educate the farmers about the health of Soil.
Smt. K.M Savithamma, Urukunte Mittoru, Mulbagal, Kolar	
32	Suggested to conduct Demonstration on silage preparation of fodder crops and creating awareness among the farmers.
Smt. Rathnamma, Gundamanatha, Shrinivasapura, Kolar	
33	Suggested to Scientist to provide direction on value addition of vegetables when market prices are fluctuating and farmers should take guidelines from Scientist instead of throw on road.

PART II - DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
Irrigated (bore well)	Tomato- Pole beans, Potato, Ragi, Vegetables, Mulberry, Coconut, Sapota, papaya, Guava etc.
Tank Irrigated	Paddy
Rainfed	Ragi based mixed cropping, Groundnut based intercropping, Maize, Pigeon pea, Horse gram, Field bean, Mango, Cashew, Tamarind etc.
Enterprises	Sericulture, Dairy, Poultry, Sheep and Goat rearing

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

S. No	Agro-climatic Zone	Characteristics
1	Eastern dry zone	<p>Kolar district is a drought prone district and all the taluks comes under agro climatic zone-5 i.e., eastern dry zone. It is characterized by low, scanty and uneven distributed rainfall with shallow and poor soils. Kolar district is having a typical rain fed situation with an average rainfall of 726.6 mm with 45.1 rainy days.</p> <p>Agriculture in the district is mainly rain fed and it has no perennial rivers. Tanks and tube wells are the main sources of irrigation. The district has 2328 tanks irrigating an area of 22795ha and no. of tube wells are 84286 with a net irrigable area of 33469 ha which accounts for 19.61 % of net sown area.</p>

S. No	Agro ecological situation	Characteristics
1	Semi-arid climate	The district receives an annual rainfall of 744 mm received in 45 rainy days. The duration of the monsoon, however, seems to be shrinking with the first three months in the year receiving very little rainfall in recent times. The rainfall distribution has two peaks, one during May and another during September. It is characterized by erratic and uneven distribution. Predominantly the tube wells/bore wells are the major source of irrigation in the district. There are about 41,311 ha of land being irrigated through such bore wells. The number of irrigation pump sets existing in the district is 50,366. Tanks and open wells are the other sources of irrigation.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Medium deep, red clayey soil	Red to a bright reddish-orange in color. They are typically quite acidic, often having a pH of less than 5.	7026
2.	Medium deep, red gravelly soil	Red in color which is mainly due to ferric oxides. They are usually poor growing soils, low in nutrients and humus.	17946
3.	Deep, red clayey loam soil	Clay loam is a soil mixture that contains more clay than other types of rock or minerals. These soils contains a good amount of plant nutrients and supports most types of plants and crops	88400
4.	Deep, red clayey soil	Soil mixture contains less clay component. Nutritionally poor.	119720
5.	Deep, red gravelly clay soil	Same as clayey loam but gravelly in nature	20363
6.	Deep, lateritic clayey soil	These soils are rich in iron and aluminum. Nearly all laterites are rusty-red because of iron oxides.	16813
7.	Deep, lateritic gravelly clayey soil	Characteristically similar to the lateritic clayey but stony and gravelly nature less suitable for arable crop cultivation	10940
8.	Deep, alluvial clayey soil (salt affected)	A soil deposit developed on floodplain and delta deposits. Soil supports good crop growth.	92843
9.	Red gravelly clay soils (Rocky land)	They are less clayey and sandier and are poor in important minerals like lime, phosphorous and nitrogen. Red soil is acidic like that of the Lateritic soil.	11036

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

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
Field crops				
1.	Ragi	68505	158783.87	2319
2.	Paddy	1892	5680.93	2972
3.	Ground nut	7065	14187	7065
4.	Avare	7675	4028	516
5.	Tur	2335	4213	1252

6.	Maize	206	45232	4000
7.	Cowpea	1048	439	271
8.	Horse gram	239	970	1216
9.	Minor millets	238	685	826
	Vegetable crops			
10.	Tomato	19147.46	797184.866	56765
11.	Potato	3561.4	57751.76	16220
12.	Beans	1932.9	20498.1	10600
13.	Cabbage	1305.8	26730.18	20470
14.	Knol-khol	224.02	4050.24	18080
15.	Green chilli	545.18	11120.3	20400
16.	Carrot	1071.4	20863.09	19470
17.	Brinjal	525.34	16212.6	30860
18.	Radish	595.87	7078.53	11880
19.	Cauliflower	1301.55	21364.79	16410
20.	Onion	49.79	964.059	19360
21.	Capsicum	573.54	11706.6	20410
22.	Ladies finger	210.36	1956.84	9300
23.	Drumstick	131.73	282.021	2140
24.	Beetroot	156.67	2776.46	17720
25.	Methi	55.13	609.048	11050
26.	Palak	52.95	519.424	9810
27.	Amaranthus	85.96	1515.43	17630
28.	Pumpkin	257.8	6491.03	25180
29.	Ridge gourd	421.54	3720.82	8830
30.	Bitter gourd	178.25	1440.67	8080
31.	Bottle gourd	199.77	29.8.16	14560
32.	Snake gourd	26.88	423.14	15740
33.	Ash gourd	33.86	709.173	20940
34.	Cucumber	538.44	8592.39	15960
	Fruit crops			
35.	Mango	49425.85	422218.42	8530
36.	Banana	479.15	15164.28	3165
37.	Canvandish	335.41	10241.57	3188
38.	Sapota	182.54	2808.94	15380
39.	Guava	456.05	7921.05	17220
40.	Papaya	155.49	11295.95	72610
41.	Grapes	165	3377	20470
42.	Citrus and its sps.	51.89	1328.11	24730
43.	Pomegranate	186.21	1994.22	10730
44.	Custard apple	495	3974	8030
45.	Watermelon	3.81	167.99	50400
46.	Amla	18	144	8037
47.	Ber	0.49	4.66	1490
	Plantation crops			
48.	Coconut	5664	627	110
49.	Cashewnut	2042	3940	1930
50.	Arecanut	3	4.96	1500
	Aromatic crops			
51.	Davana	657	6455	9650
52.	Geranium	63	885	13920
	Spice crops			
53.	Tamarind	1262.9	5290.49	4200
54.	Coriander	1742.34	1045.48	5227
55.	Ginger	11.85	142.32	12010
56.	Dry chilli	396.23	637.21	1610
57.	Turmeric	1.98	18.315	9250
58.	Garlic	2.66	20.626	7750
	Flower crops			
59.	Marigold	2018.92	19669.4	9740
60.	Rose	374.99	803.93	2130
61.	Chrysanthemum	552.79	7829.831	14160
62.	Aster	160	1573	14090

63.	Jasmine	21.6	148.4	7170
64.	Crossandra	100	535	7170
65.	Davana	3	25	9800
	Sericulture			
66.	Mulberry	19617	784680	50000
67.	Cocoon production	142.49 dfls	10062.49	507

* Dept of Agriculture & Horticulture (2020)

2.5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
January	1.4	29.10	17.24	87
February	0.2	30.86	17.51	87
March	14.7	32.47	20.46	79
April	48.7	35.12	21.65	71
May	62.2	36.12	22.34	75
June	73.2	32.27	21.22	76
July	240	32.1	20.10	76
August	104	30.2	19.8	78
September	183.6	28.71	19.48	83
October	127	28.70	19.00	78
November	101	28.49	18.42	80
December	18	26.82	16.02	84
Total	974			
Average	-	30.91	19.43	79.5

* Please provide latest data from authorized sources. Met Centre Bengaluru

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	173620	-	-
<i>Indigenous</i>	55416	-	-
Buffalo	45876	-	-
Sheep			
<i>Crossbred</i>	2197		
<i>Indigenous</i>	442903		
Goats	86263		
Pigs	2385		
<i>Crossbred</i>	1872		
<i>Indigenous</i>	312		
Rabbits			
Poultry			
Hens	4275529		
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			
Fish			
<i>Marine</i>			
<i>Inland</i>	38.76 lakh (Fish seed stock)	1848 tons	
Prawn			
Shrimp			

* Kolar Dist. At a glance, Dist. Statistical office, 2020

2.7 District profile maintained in the KVK has been **Updated** for 2020: Yes / No : YES

2.8 Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kolar	-	Yadahalli	1	Ragi, potato, mulberry, Tomato, Marigold, Nutritional security	1.Early or mid season drought, erratic rainfall , blast and lack of awareness on use of micronutrients/biofertilizers 2.Excess haulm development at the cost of tuber, late blight, mite, tuber moth and defoliator problem 3.Severity of American pin orm, Thrips, Red mites, Fruit borer, Early and Late blight, indiscriminate use of PP chemicals 4.Severity of SLM, Thrips, Red mites and Bud worm in marigold 5. Less intake of fresh vegetables in daily diet	Yield optimization through improved varieties, IPM and IPDM and nutritional security
2	Bangarpet	-	Thimmasandra	2	Tomato, Cauliflower , Mulberry, Silkworm rearing, Milk production, Nutritional Security	1.Injudicious use of fertilizers, Uneven sized fruits, Discolored fruits, Blossom End Rot, Poor quality of fruits affecting marketability 2. Diamond back moth and aphids severity 3. Lack of information on better utilization of sericulture farm residue 4. Reduced good cocoon yield due to increase in disease incidence 5. Lack of awareness and knowledge on preparing value added products, labeling, branding and marketing of the product 6. Less intake of fresh vegetables in daily diet	Judicious use of nutrients, IPM and IPDM and nutritional security and entrepreneurs hip development
3	Srinivaspura	-	Kadudevandahalli	2	Horse gram, Mango, Tomato, Mulberry, Silkworm rearing, Tamarind, Nutritional Security	1.Traditional varieties, Low yield and yellow mosaic menace 2.Inadequate water conservation measures, no micro nutrient management, poor canopy management, Improper management of pest and diseases, fruit drop, low yield and quality of fruits 3. Non-utilization of inter space in mango orchards 4.Improper application of chemical fertilizers, non utilization of biofertilizers, green manures and micronutrients 6. Severe infestation of uzi fly during rainy and winter seasons, more defective cocoon leads to low cocoon price 7. Reduced good cocoon yield due to increase in disease incidence 8. Less intake of fresh vegetables in daily diet	Yield optimization through improved varieties, ICM practices, better utilization of interspace, Effective pest and disease mgt.
4	Malur	-	Thippasandra	2	Chilli, Pole beans, Cauliflower , Ridge gourd, Nutritional Security	1. Poor nutrient management, Flower drop, Murda complex, Leaf spot, Powdery mildew and Anthracnose incidence 2.Severe incidence of Yellow Mosaic Virus and Low yield 3. Whiptail , Brown rot, DBM incidence and Low yield with poor quality curd 4. Heavy incidence of yellow vein mosaic disease resulting in yield losses 5.Less intake of fresh vegetables in daily diet	Yield optimization through improved varieties, IPM and IPDM

2.8 Details of Benchmark Information collected from DFI villages

Sl.No.	Taluk	Name of the block	Name of the village	Name of the Head of Household	Annual Gross Income (Rs.)	Annual Expenditure (Rs.)	Annual Net Income (Rs.)
1.	Kolar	Kasaba	Yadahalli	Raghu	118000	80333	37667
2.	Kolar	Kasaba	Yadahalli	Praksah	64500	40832	23668
3.	Kolar	Kasaba	Yadahalli	Shamachari	80500	42000	38500
4.	Kolar	Kasaba	Yadahalli	Ramachandra	103000	52998	500002
5.	Kolar	Kasaba	Yadahalli	Chandrasekar	46666	30498	16168
6.	Kolar	Kasaba	Yadahalli	Nagesh	100832	50582	50250
7.	Kolar	Kasaba	Yadahalli	Raghu	650000	235000	415000
8.	Kolar	Kasaba	Yadahalli	Bacchegowda	240000	110000	130000
9.	Kolar	Kasaba	Yadahalli	Shyamachari	180000	55000	125000
10.	Kolar	Kasaba	Yadahalli	Shekar	320000	105000	215000
11.	Kolar	Kasaba	Yadahalli	Prakash	430000	210000	220000
12.	Kolar	Kasaba	Yadahalli	Babu	345000	125000	220000
13.	Bangarpet	Bethamangala	Thimmasandra	Gopalappa	180000	60000	120000
14.	Bangarpet	Bethamangala	Thimmasandra	Munivenkatappa	225000	80000	145000
15.	Bangarpet	Bethamangala	Thimmasandra	Chandrayappa	345000	180000	165000
16.	Bangarpet	Bethamangala	Thimmasandra	Raju	245000	108000	137000
17.	Bangarpet	Bethamangala	Thimmasandra	Anjanappa	410000	185000	225000
18.	Bangarpet	Bethamangala	Thimmasandra	Munivenkatamma	245000	108000	137000
19.	Bangarpet	Bethamangala	Thimmasandra	Muniswamy	224000	100000	124000
20.	Bangarpet	Bethamangala	Thimmasandra	Venkataramu	328000	188000	140000
21.	Malur	Rajenahalli	Thippasandra	Muniyappa	32499	25747	6752
22.	Malur	Masti	Thippasandra	Madhu. M	510000	185000	325000
23.	Malur	Masti	Thippasandra	Muniyappa	390000	309000	81000
24.	Malur	Masti	Thippasandra	Satish	110000	59000	51000
25.	Malur	Masti	Thippasandra	Papanna	60800	32500	28300
26.	Malur	Masti	Thippasandra	Murugesh	175000	141000	33500
27.	Malur	Masti	Thippasandra	Govindaraju	97000	26000	71000
28.	Malur	Masti	Thippasandra	Chinnappa	180000	71500	108500
29.	Malur	Masti	Thippasandra	Venkateshappa	120000	45000	75000
30.	Malur	Masti	Thippasandra	Ravikumar	305000	157000	148000
31.	Malur	Masti	Thippasandra	Perimal Ganesh	36000	13000	23000
32.	Malur	Masti	Thippasandra	Ashwathappa	100000	78000	22000
33.	Malur	Masti	Thippasandra	Ashwathappa	183000	118000	65000
34.	Malur	Masti	Thippasandra	Ramanji	310000	220000	90000
35.	Malur	Masti	Thippasandra	Harish. K.	1238250	766000	472250
36.	Malur	Masti	Thippasandra	Veeregowda T.N.	326000	190000	136000
37.	Malur	Masti	Thippasandra	Gundappa	69000	44000	25000
38.	Malur	Masti	Thippasandra	Subramani D.	150000	72000	78000
39.	Srinivaspura	Kasaba	Kadudevandahalli	Manjunath	948000	450000	498000

40.	Srinivaspura	Kasaba	Kadudevandahalli	Ramesh	460000	220000	240000
41.	Srinivaspura	Kasaba	Kadudevandahalli	Parvathamma	180000	65000	115000
42.	Srinivaspura	Kasaba	Kadudevandahalli	Muniswamy	255000	85000	170000
43.	Srinivaspura	Kasaba	Kadudevandahalli	Venkateshappa	325000	95000	230000
44.	Srinivaspura	Kasaba	Kadudevandahalli	Munivenkatappa	225000	85000	140000
45.	Srinivaspura	Kasaba	Kadudevandahalli	G.Narayanappa	425000	175000	250000
46.	Srinivapura	Kasaba	Kadudevandahalli	Ramesh. M.	372000	349200	22800
47.	Srinivapura	Kasaba	Kadudevandahalli	Munishyami gowda	349992	210000	139992
48.	Srinivapura	Kasaba	Kadudevandahalli	M.,Ramakrishna gowda	660000	402000	258000
49.	Srinivapura	Kasaba	Kadudevandahalli	D.L. Narayaswamy	429600	336000	93600
50.	Srinivapura	Kasaba	Kadudevandahalli	Anjinappa	144000	108000	36000
51.	Srinivapura	Kasaba	Kadudevandahalli	Goplakrishnagowda	462000	343200	118800
52.	Srinivapura	Kasaba	Kadudevandahalli	Madhu	324000	204000	120000
53.	Srinivapura	Kasaba	Kadudevandahalli	N. Venkatesh gowda	168000	139200	28800
54.	Srinivapura	Kasaba	Kadudevandahalli	Dhanunjay gowda	1464000	1428000	36000
55.	Srinivapura	Kasaba	Kadudevandahalli	Venkateshappa C.	1483200	480000	1003200
56.	Srinivapura	Kasaba	Kadudevandahalli	Chowdegowda. R.	193992	160800	33192
57.	Srinivapura	Kasaba	Kadudevandahalli	K..C. Prabhu	399984	249996	149988
58.	Srinivapura	Kasaba	Kadudevandahalli	Munivenkatappa. S.	480000	181200	298800
59.	Srinivapura	Kasaba	Kadudevandahalli	Munishaymigowda. D. R.	187992	160488	27504
60.	Srinivapura	Kasaba	Kadudevandahalli	Krishnappa. K.N.	420000	380796	39204
61.	Srinivapura	Kasaba	Kadudevandahalli	Munivenkatappa.L.	498000	438792	59208
62.	Srinivapura	Kasaba	Kadudevandahalli	Munivenkatappa. E.	1404000	339984	1064016
63.	Srinivapura	Kasaba	Kadudevandahalli	Munishyamigowda	456600	310200	146400
64.	Srinivapura	Kasaba	Kadudevandahalli	Chowdappa	102000	66300	35700
65.	Srinivapura	Kasaba	Kadudevandahalli	Ramachandregowda	987600	922200	65400
66.	Srinivapura	Kasaba	Kadudevandahalli	Harish gowda	145000	108000	37000
67.	Srinivapura	Kasaba	Kadudevandahalli	Munirajgowda	507000	390000	117000
68.	Srinivapura	Kasaba	Kadudevandahalli	K. M.Ravi	331800	288000	43800
69.	Srinivapura	Kasaba	Kadudevandahalli	Munegowda	312000	180000	132000
70.	Srinivapura	Kasaba	Kadudevandahalli	Padmanna	504000	228000	276000
71.	Srinivapura	Kasaba	Kadudevandahalli	Somasekhar	552000	272400	279600
72.	Srinivapura	Kasaba	Kadudevandahalli	Venkateshappa	840000	438000	402000

2.9 Priority thrust areas

S. No	Thrust area
1.	Yield optimization through improved varieties
2.	IPM and IDM and micro nutrient management in horti. crops
3.	Soil and water conservation & INM practices in fruits and vegetables
4.	Insect pest management in mulberry and silkworm rearing
5.	Effective conversion of organic waste in to manure
6.	Value addition in milk and groundnut
7.	Providing nutritional security to farm families through nutri-gardens

PART III - TECHNICAL ACHIEVEMENTS (2020)

3.A. Target and Achievements of mandatory activities

OFT				FLD			
1				2			
OFTs (No.)		Farmers (No.)		FLDs (No.)		Farmers (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
5	5	15	15	17	17	189	173

Training				Extension Programmes			
3				4			
Courses (No.)		Participants (No.)		Programmes(No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
107	75	2760	4461	702	1732	11970	14293

Seed Production (Q)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Sunhemp, -250 kg	120 kg	Drumstick seedlings-6000 No.	20432 No.
COF3-31-0	50 kg	Mulberry seedling-20000 No.	4520 No.
		Curry leaf seedlings-1000 No.	442 No.

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
		Mango special-500 kg	-
		Waste Decomposer-NIL	1015 No.

3.B1. Abstract of interventions undertaken

S. No	Thrust area	Crop/Enterprise	Identified Problem	Interventions									Supply of bio products	
				Title of OFT if any	Title of FLD if any	No. of Training (farmers)	No. of Training (Youths)	No. of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	No.	Kg
		Ridge gourd	Yellow mosaic menace	Assessment on management of yellow mosaic in Ridge gourd		1			6				soil application of carbofuran @1.5kg ai/ha, Seed treatment with Thiomethaxam 25 WG – 5g/kg seeds Mulching with black silver mulch Intercropping with two rows of border crops of maize Soil application of <i>Pseudomonas fluorescens</i> along with neem cake	250 g FC FC 5 kg 5 kg 100 kg

												Installation of yellow sticky trap @ 10no/acre,	10 no.
												Spraying of neem soap (5g/L),	2 kg
												seaweed extract (1.5ml/L)	500 ml
												<i>Beauveria bassiana</i> (2ml/L)	1 ltr
												Azadirachtin 10000ppm	1 ltr
												Thiamethoxam 25% WG (0.5 g/L)	100 gm
												Imidacloprid 17.8 SL (0.5ml/L)	FC
		Mulberry	Lack of information on better utilization of silkworm bed waste, non availability of proper technology	Assessment of different compost culture in composting of Seri farm residue		1			7			Seri farm residue + cow dung slurry + microbial culture	2.5 kg
												Seri farm residue + Rock phosphate + microbial culture	20 kg 2.5 kg
												Seri farm residue + Waste decomposer (2kg Jaggery in 200 L water + waste decomposer)	2kg 20
												Compost analysis	3 Nos.
		Sericulture	Severe infestation of uzifly during rainy and winter, more defective cocoon leads to low cocoon price	Assessment of management of uzifly in silkworm rearing		1			9			Uzi trap	1 Sheet
												Yellow sticky trap	8 No
												Sex Pheromone trap	8 No
			Lack of information on application of suitable eco friendly foliar nutrition to enhance quality and yield of mulberry	Assessment of foliar nutritional management in mulberry through eco friendly approach					5			Poshan Liquid Biofertilizer	1 lit 3 lit
												Waste Decomposer solution	2 nos.

		Potato	Imbalanced fertilizers application Low yield Soft rot during storage and Decline in soil health	Demonstration of Assessment of various nutrient management practices in potato		1			7				Magnesium sulphate Azospirillum Phosphobacterium Calcium Chloride Ammonium Sulphate Soil analysis	15 kg 2 kg 2 kg 5 kg 15 kg 2
		Finger Millet	Early or mid season drought, erratic rainfall, blast and lack of awareness on use of micronutrients/biofertilizer		Introduction of new Ragi variety KMR630 for higher yields and drought mitigation	1			5				Seeds Azospirillum Carbendazim	10 kg 200g 250g
		Horse gram	Traditional varieties, Low yield and yellow mosaic menace		Introduction of CRIDA-18 Horse gram for yield enhancement				4				Seeds Rhizobium PSB	10 Kg 500g 500 g
		Red gram	Phytophthora wilt, sterility mosaic <i>Fusarium</i> wilt and insect pest incidence		Integrated crop management in Red gram (NFSM)				12				Seeds Rhizobium PSB Trichoderma Neemazal Pulse magic Dicofol Profenophos DDVP Indoxacarb	5 kg 200 g 200 g 50 g 400 ml 4 kg 500 ml 1000 ml 250 ml 200 ml
		Tomato	South American pin worm, Thrips, Red mites, Fruit borer, Early and Late blight menace, indiscriminate use of PP chemicals		Integrated insect pest and disease management in Tomato	1			10				AMC Pheromone traps Vegetable special Y/B sticky traps Neemazal Mancozeb Spinetoram Fenamidone-mancozeb Flubendiamide Fostyl Al	2 ltr 10 no. 3 kg 20 each 1 lit 2.0 kg 100 ml 0.6 kg 30 ml 1.0 kg
		Pole beans	Low yield due to severe incidence of Yellow Mosaic Virus		Management of Yellow Mosaic Virus in Pole bean through Integrated Approach				5				Pseudomonas fluorescens Yellow Sticky Traps Beauveria bassiana Salicylic Acid Neem soap Imidacloprid Seaweed extract Thiomethaxam	3 lt 10 1 lt 250 ml 2 kg 120 ml 500ml 100 gm
		Mari gold	Local variety, non-practice of pinching, pest and disease		Demonstration of marigold variety 'Arka Agni'				7				Cuttings of Arka Agni Blue & Yellow sticky traps	2000 40

	Mulberry	Adverse microclimatic condition in the silkworm rearing house leads to low cocoon yield & price		Demonstration of fogging technology in silkworm rearing house for better cocoon productivity			8				Fogging system	1
	Mulberry	Improper application of chemical fertilizers, non utilization of biofertilizers & green manures		Integrated nutrient management in mulberry for higher productivity			6				Sunhemp seed Microbial consortium Poshan NPK & FYM	8 kg 3 ltrs 1 ltrs
	Silkworm rearing	Rearing of cross breed silkworm leads to low gradable silk and low cocoon price		Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production and crop stability			7				Seriswach Sanitech super Ankush Vijetha Hygrometer Chawki worms	100 gm 2.5 ltr 6 kg 1 100 dfls
	Fruits and Vegetables	Malnutrition among rural population, non accessibility of quality vegetables		Demonstration of nutrition Garden for nutritional security in DFI villages			4				Seeds and planting materials Biofertilizers	800 100

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No.ofprogrammes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1.	Assessment on management of yellow mosaic in Ridge gourd	IIVR, Varanasi	Ridge gourd	3	-	1	6 (Field visits)
2.	Assessment of different compost culture in composting of Seri farm residue	NCOF, Ghaziabad	Mulberry	3	-	1	7 (Field visits)
3.	Assessment of management of uzifly in silkworm rearing	CSRTI Mysore	Silkworm	3	-	1	9 (Field visits)
4.	Assessment of foliar nutritional management in mulberry through eco friendly approach	NCOF, Ghaziabad	Mulberry	3	-		5 (Field visits)
5.	Demonstration of Assessment of various nutrient management practices in potato	CPRI, Shimla	Potato	3	-	1	7 (Field visits)
6.	Introduction of new Ragi varietyKMR630 for higher yields and drought mitigation	UAS, Bengaluru	Ragi	-	20	-	-
7.	Introduction of CRIDA-18 Horse gram for yield enhancement	CRIDA, Hydrabad	Horsegram	-	10	-	-
8.	Integrated crop management in Red gram (NFSM)	UAS,B	Redgram	-	35	-	4 (Field visits)
9.	Integrated insect pest and disease management in Tomato	IIHR Bengaluru	Tomato	-	10	1	10 (Field visits)

Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Cropping Systems										
Farm Mechanization										
Mushroom cultivation										
others				Sericulture Mulberry						2
Total				3	2					5

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										
Storage Technique										
Cropping Systems										
Farm Mechanization										
Mushroom cultivation										
Others										
Total										

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

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						
Dairy						
Others (Pl. specify)						
TOTAL						

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

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						
Dairy						
Others (Pl. specify)						
TOTAL						

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technologies	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all Technological Options in a farm)
Integrated Nutrient Management	Mulberry	Assessment of foliar nutritional management in mulberry through eco friendly approach	03	03	1.2
	Potato	Demonstration of Assessment of various nutrient management practices in potato	03	03	1.2
Varietal Evaluation					
Integrated Pest Management	Ridge gourd	Assessment on management of yellow mosaic in Ridge gourd	03	03	1.2
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					

Others	Mulberry	Assessment of different compost culture in composting of seri farm residue	03	03	1.2
	Silkworm	Assessment of management of uzifly in silkworm rearing	03	03	600 dfls
Total			15	15	4.8

4.B.2. Technologies Refined under various Crops

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

4.B.3. Technologies assessed under Livestock

Thematic areas	Name of the livestock	Name of the technologies	No. of trials	No. of farmers/locations
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	Name of the technologies	No. of trials	No. of farmers/locations
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

4.B.5. Technologies assessed under various enterprises by KVKs

Sl.	Thematic areas	Name of the enterprise	Name of technology(s)	No. of trials	No. of locations
1	Drudgery reduction				
2	Entrepreneurship Development				
3	Health and nutrition				
4	Processing and value addition				
5	Energy conservation				
6	Small-scale income generation				
7	Storage techniques				
8	Household food security				
9	Organic farming				
10	Agroforestry management				
11	Mechanization				
12	Resource conservation technology				
13	Value Addition				
14	Others				

4. B.6. Technologies assessed under various enterprises for women empowerment

Sl.	Thematic areas	Name of enterprise	Name of technology(s)	No. of trials	No. of locations
1	Drudgery Reduction				
2	Entrepreneurship Development				
3	Health and Nutrition				
4	Value Addition				
5	Women Empowerment				
6	Others(Home science)				

4.C1.Results of Technologies Assessed

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	Gross Return Rs. / unit	Net Return Rs. / unit	BC Ratio (Gross income / Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13
Ridge gourd	Irrigated	Yellow mosaic menace	Assessment on management of yellow mosaic in Ridge gourd	03	TO1: Imidacloprid (0.05%) / Acephate (0.1%) Lancer gold (0.2%), Spinosad (0.15%), Fipronil (0.15%), Rynaxypyr (0.05%), Acetamiprid (0.05%), Thiamethoxam (0.1%), Deltamethrin (0.2%)	FP	73.30	q/ha	Yellow mosaic (%) -10.20 Whitefly (no./leaf) -8.44	132000	46616	1.54
					TO2: Neem cake application (250 kg/ha) Spray of Neem Soap (10g/l) / Thiamethoxam (0.05%) / Azadirachtin (0.3%) / Acephate (0.1%) / NSKE (4%) spray	IHR, Bengaluru	85.60	q/ha	Yellow mosaic (%) - 8.20 Whitefly (no./leaf) -7.80	154200	66453	1.75
					TO3: Seed treatment with Thiomethaxam 25 WG – 5g/kg seeds Mulching with black silver mulch Intercropping with two rows of border crops of maize Soil application of Pseudomonas fluorescens along with neem cake Installation of yellow sticky trap @ 10no/acre, Spraying of neem soap (5g/L), seaweed extract (1.5ml/L) Beauveria bassiana (2ml/L) Azadirachtin 10000ppm Thiamethoxam 25% WG (0.5 g/L) Imidacloprid 17.8 SL (0.5ml/L)	IIVR, Varanasi	101.60	q/ha	Yellow mosaic (%) -7.1 Whitefly (no./leaf) -5.3	183000	93612	2.04

Mulberry		Lack of information on better utilization of silkworm bed waste, non availability of proper technology	Assessment of different compost culture in composting of Seri farm residue	03	TO1:Seri farm residue + cow dung slurry		36.20	q/ha/year	Compost yield (kg/t):724, Maturity indisease(No. of days): 281 % recovery on weight basis(%):72.41	7260	5260	3.63
					TO2: Seri farm residue + cow dung slurry + microbial culture	UAS, Bangalore	143.8	q/ha/year	Compost yield (kg/t):826.40, Maturity indisease(No. of days): 105 % recovery on weight basis(%):82.64	28760	25169	8.00
					TO3:Seri farm residue + Rock phosphate + microbial culture	CSRTI Mysore	178.7	q/ha/year	Compost yield (kg/t):853.60, Maturity indisease(No. of days): 87 % recovery on weight basis(%):85.36	35740	32757	11.98
					TO4:Seri farm residue + Waste decomposer (2kg Jaggery in 200 L water + waste decomposer)	NCO F, Ghazi abad	223.2	t/ha/year	Compost yield (kg/t):893, Maturity indisease(No. of days): 78 % recovery on weight basis(%):88.96	44640	42140	17.85
Sericulture		Severe infestation of uzifly during rainy and winter, more defective cocoon leads to low cocoon price	Assessment of management of uzifly in silkworm rearing	03	TO1:Fixing Nylon net on all doors and windows Farmers' Practice	-	79.31	Kg/100 dfls	No.of uzifly trapped:0, Silkworm infested by uzifly: 5.47%, uzi pierced cocoon: 2.90%, Defective cocoon percent:1.56%	29741	19241	2.83
					TO2: Fixing Nylon net + Uzi trap (6 Nos) on all doors and windows	CSRTI, Mysore	82.90	Kg/100 dfls	No.of uzifly trapped:29, Silkworm infested by uzifly: 3.54%, uzi pierced cocoon: 1.95%, Defective cocoon percent:1.04%	32331	21731	3.05
					TO3: Fixing Nylon net + Yellow sticky trap (5 Nos) on all doors and windows	KSS RDI, Bangalore	87.62	Kg/100 dfls	No.of uzifly trapped:51, Silkworm infested by uzifly: 2.15%, uzi pierced cocoon: 1.11%, Defective cocoon percent:0.65%	34609	23709	3.18
					TO4: Fixing Nylon net + Sex pheromone trap (5 Nos) on all doors and windows	CSRTI Mysore	92.45	Kg/100 dfls	No.of uzifly trapped:146, Silkworm infested by uzifly: 0.72%, uzi pierced cocoon: 0.47%,	36980	25920	3.34

								Defective cocoon percent:0.23%				
		Lack of information on application of suitable eco friendly foliar nutrition to enhance quality and yield of mulberry	Assessment of foliar nutritional management in mulberry through eco friendly approach	03	TO1:Application of Recommended NPK (140kg:56kg:56kg) & 20 ton FYM (Acre/yr)	FP	96.19	q/ha/crop	cocoon yield(kg/ha):353.31, No. of branches/plant:14.13, No. of leaves/plant:23.90, Leaf yield (kg/plant):1.06	123658	73658	2.47
					TO2: Application of Recommended NPK & FYM (Acre/yr) + Foliar spray of Poshan (1lts/acre/crop)	CSRTI Mysore	120.84	q/ha/crop	cocoon yield(kg/ha):450.30, No. of branches/plant:16.43, No. of leaves/plant:25.66, Leaf yield (kg/plant):1.331	162108	111386	3.19
					TO3:Application of Recommended NPK & FYM (Acre/yr) + Foliar spray of liquid microbial consortia (2lts/acre/crop)	UAS, Bengaluru	115.85	q/ha/crop	cocoon yield(kg/ha):416.83, No. of branches/plant:15.43, No. of leaves/plant:24.90, Leaf yield (kg/plant):1.276	150058	98933	2.93
					TO4: Application of Recommended NPK & FYM (Acre/yr) + Foliar spray of Waste decomposer solution (100 ltrs/acre/crop)	NCOF, Ghaziabad	121.87	q/ha/crop	cocoon yield(kg/ha):459.28, No. of branches/plant:16.80, No. of leaves/plant:26.0, Leaf yield (kg/plant):1.343	165340	114965	3.28
Potato		Imbalanced fertilizers application Low yield Soft rot during storage and Decline in soil health	Demonstration of Assessment of various nutrient management practices in potato	03	TO1:Indiscriminate use of DAP and MOP	FP	154.50	q/ha	No of Tubers per plant -7.0 Weight of tubers per plant – 458.56 % Blight Incidence-16.55	1401455	276879	3.22
					TO2:FYM@ 25 t/ha, NPK: 125:100:125 kg/ha Soil test based nutrient application 50% N, 100% P&K as basal dose at the time of planting 50% N at 4 weeks after planting	UHS Bagal kot	172.0	q/ha	No of Tubers per plant -6.2 Weight of tubers per plant – 498.12 % Blight Incidence-12.45	2434576	308119	3.44
					TO3:FYM@ 15 t/ha, NPK-120:240:120 kg/ha, 2 kg Azospirillum, 2 kg Phosphobacteriu	TNAU, Coimbatore	201.0	q/ha	No of Tubers per plant -6.80 Weight of tubers per plant – 518.45 % Blight Incidence- 7.65	3464575	338097	3.67

				m and 60 kg/ha MgSO ₄ , 50% NPK and 100 % MgSO ₄ at the time of planting, 50% NPK at 30 days afterplanting								
				TO4:FYM@ 15 t/ha, NPK- 140:60:60 kg/ha, Ca – 8 kg/ha and Sulphur 30 kg/ha, 2/3rd N, 100% P&K at the time of planting, 1/3rd of N at 25 days after planting	CPRI, Shimla	194.2	q/ha	No of Tubers per plant -6.8 Weight of tubers per plant – 502.15 % Blight Incidence- 5.45	4478965	352550	3.79	

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of different compost culture in composting of Seri farm residue	1.Among different compost culture waste decomposer solution decomposed waste material in short time 2.Production of compost in short period 3. Cheap and best	-
Assessment on management of uzi fly in silkworm rearing	1.Installation of sex pheromone traps near doors and windows of silkworm rearing trapped more uzifly 2. Reduced defective cocoons 3.More returns	-
Assessment of foliar nutritional management in mulberry through eco friendly approach	1.Recommended NPK+ FYM+ foliar spray of Waste Decomposer solution increases the growth & yield parameters & it was followed by TO2 2.Cost & preparation of foliar spray cheap & best & eco-friendly approach	-

4.C3. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. Title of Technology Assessed: Assessment of different compost culture in composting of Seri farm residue

2. Performance of the Technology on specific indicators: TO4: Seri farm residue + cowdung & slurry + Waste Decomposer solution recorded Compost yield (kg/t):893 (kg/ton) , Maturity in disease(No. of days): 78 Days, % recovery on weight basis(%):88.96(%), Compost yield(t/ha): 22.32 compared to farmer practice.

3. SpecificFeedback from farmers Among different compost culture waste decomposer solution decomposed waste material in short time, Production of compost in short period,Cheap and best.

4. Specific Feedback from Extension personnel and other stakeholders : TO4: Seri farm residue + cowdung & slurry + Waste Decomposer solution found best technology for compost production compared to others compost cultures

5. Feedback to Research System based on results and feedback received: Produce good quality compost in short period as per requirement of the farmers & reduce the cost of cultivation & purchasing FYM from outside

6. Feedback on usefulness and constraints of technology :Recycling of crop residue/ organic waste for enriched compost production

1. Title of Technology Assessed :Assessment of management of uzifly in silkworm rearing

2. Performance of the Technology on specific indicators: TO4: Installation of sex pheromone traps near doors and windows of silkworm rearing house recorded cocoon yield 92.45kg/100 dfls, No.of uzifly trapped:146, Silkworm infested by uzifly: 0.72%, uzi pierced cocoon: 0.47%, Defective cocoon percent:0.23% over farmer practice.

2. Specific Feedback from farmers: Installation of sex pheromone traps near doors and windows of silkworm rearing trapped more uzifly, inturn Reduced the defective cocoons % , & fetching more returns in market
3. Specific Feedback from Extension personnel and other stakeholders :.Installation of sex pheromone traps near doors and windows of silkworm rearing trapped more uzifly in turn increased the cocoon yield
4. Feedback to Research System based on results and feedback received: 1.Installation of sex pheromone traps near doors and windows of silkworm rearing trapped more uzifly 2. Reduced defective cocoons 3. Reduced defective cocoons , More returns
5. Feedback on usefulness and constraints of technology:Reduced defective cocoon percent

1. Title of Technology Assessed : Assessment of foliar nutritional management in mulberry through eco friendly approach

2. Performance of the Technology on specific indicators: TO4: Foliar spray of waste decomposer solution (1:1 ratio) recorded more Leaf yield (q/ha/crop): 121.87, cocoon yield(kg/ha):459.28, No.of branches/plant:16.80, No.of leaves/plant:26.0, compared to farmer practice.
3. SpecificFeedback from farmers: Recommended NPK+ FYM+ foliar spray of Waste Decomposer solution increased the growth & yield parameters of mulberry & it was on par with foliar spray of poshan(TO2)
4. Specific Feedback from Extension personnel and other stakeholders : foliar spray of Waste Decomposer solution improves the quality of mulberry & also leaf yield.
5. Feedback to Research System based on results and feedback received: Recommended NPK+ FYM+ foliar spray of Waste Decomposer solution found best which is on par with foliar spray of poshan.
6. Feedback on usefulness and constraints of technology:Farmer can produce waste decomposer solution in short time, low cost, cheap & eco-freindly.

4.D1. Results of Technologies Refined : Nil

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	Gross Return Rs. / unit	Net Return Rs. / unit	BC Ratio (Gross income/ Gross Cost)
1	2	3	4	5	6	7	8	9	10	11	12	13

4. D2. Feedback on technologies refined

Name of technology refined	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption

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
6. Feedback on usefulness and constraints of technology

PART V - FRONTLINE DEMONSTRATIONS (2020)

5.A. Summary of FLDs implemented

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
	Oilseeds													
	Pulses	Rainfed	Rabi	Horse gram	CRDA-18		Crop production	Introduction of CRIDA-18 Horse gram for yield enhancement	2	2	4	6	4	6
		Rainfed	Kharif	Redgram	BRG-1		Crop production	Integrated crop management in Red gram (NFMS)	20	16	5	30	10	25
	Cereals	Rainfed	Kharif	Ragi	KMR-630	-	Crop production	Introduction of new Ragi variety KMR630 for higher yields and drought mitigation	8	8	4	16	4	16
	Millets													
	Vegetables	Irrigated	Kharif	Tomato		Saho	Pest & Disease Management	Integrated insect pest and disease management in Tomato	2	2	3	7	3	7
		Irrigated	Kharif	Pole beans	-	Ashoka NZ	Disease Management	Management of Yellow Mosaic Virus in Pole bean through Integrated Approach	1	1	-	5	0	0
		Irrigated	Kharif	Tomato		Saho	Crop Production	Demonstration of fertigation schedule in tomato for decreasing fertilizer cost and enhance quality yield	1	1	2	3	0	0
		Irrigated	Rabi	Potato	Kufri Jyothi		Crop Management	Management of late blight in potato through integrated approach	1	1	-	10	0	0

	Rabbitry													
	Piggery													
	Sheep and goat													
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Sericulture	Irrigated	Kharif	Mulberry	-	V-1	Nutrient management	Intercropping of field bean under tree mulberry cropping system for additional income	2	2	0	5	0	0
		Irrigated	Kharif	Silkworm	-	V-1	-	Demonstration of fogging technology in silkworm rearing house for better cocoon productivity	2	2	0	5	0	0
		Irrigated	Kharif	Mulberry	-	V-1	Nutrient management	Integrated nutrient management in mulberry for higher productivity	2	2	0	5	0	0

		Irrigated	Kharif	silkworm		FC2XFC1		Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production and crop stability	2	2	0	5	0	0
	Apiculture													
	Implements													
	Others (specify)			Malnutrition				Demonstration of nutrition Garden for nutritional security in DFI villages	-	-	5	25	0	0
	Home science													

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
	Oilseeds												
	Pulses	Rainfed	Rabi	Horse gram	CRDA-18		Crop production	Introduction of CRIDA-18 Horse gram for yield enhancement	Rabi	Low	Medium	Medium	Ragi
		Rainfed	Kharif	Redgram	BRG-1		Crop production	Integrated crop management in Red gram (NFSM)	Kharif				
		Rainfed	Kharif	Ragi	KMR-630	-	Crop production	Introduction of new Ragi variety KMR630 for higher yields and drought mitigation	Kharif	Low	Medium	Medium	Fallow land /Tomato
	Cereals												
	Millets												
	Vegetables	Irrigated	Kharif	Tomato		Saho	Pest & Disease	Integrated insect pest and disease	Kharif				Marigold

	Fibre												
	Sericulture	Irrigated	Kharif	mulberry	-	V-1	Nutrient management	Intercropping of field bean under tree mulberry cropping system for additional income	Kharif	Low	Medium	Medium	Mulberry
		Irrigated	Kharif	silkworm	-	V-1		Demonstration of fogging technology in silkworm rearing house for better cocoon productivity	Kharif	Low	Medium	Medium	Mulberry
		Irrigated	Kharif	Mulberry	-	V-1	Nutrient management	Integrated nutrient management in mulberry for higher productivity	Kharif	Low	Medium	Medium	Mulberry
		Irrigated	Kharif	silkworm		FC2XFC1		Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production and crop stability	Kharif	Low	Medium	Medium	Mulberry
	Others(Home Science)			Malnutrition				Demonstration of nutrition Garden for nutritional security in DFI villages					

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)			Check	% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo					Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
							H	L	A								
Oilseeds																	
Pulses	Introduction of CRIDA-18 Horse gram for yield enhancement	CRDA-18	-	Rainfed	10	2	5.80	4.32	5.06	4.35	16.32	13662	9162	3.03	11745	7245	2.61
	Integrated crop management in Red gram (NFSM)	BRG-1	-	Rainfed	35	14	12.18	10.29	11.04	8.78	25.74	51872	22540	1.77	41251	10801	1.36
Cereals	Introduction of new Ragi variety KMR630 for higher yields and drought mitigation	KMR-630	-	Rainfed	20	8	38.60	30.16	34.38	28.45	20.84	89388	42688	1.91	73970	28370	1.62
Millets																	
Vegetables	Integrated insect pest and disease management in Tomato		Saho	Irrigated 5 at Yadahalli, Kolar Tq	5	1	72.5	63.0	65.92	48.95	34.66	692160	469700	3.11	513975	297615	2.37
				Irrigated 5 at Thimmasandra, KGF tq	5	1	61.5	57.5	60.52	47.30	27.94	559810	340210	2.55	437525	224025	2.04
	Management of Yellow Mosaic Virus in Pole bean through Integrated Approach	-	Ashoka NZ	Irrigated	5	1	23.50	20.25	21.87	18.00	21.50	437400	287400	2.92	360000	222500	2.62
	Demonstration of fertigation schedule in tomato for decreasing fertilizer cost and enhance quality yield		Saho	Irrigated	5	1	86.75	64.85	75.80	85.30	-13.33	750000	510000	3.12	850000	570000	3.03
	Management of late blight in potato through integrated approach	Kufri Jyothi	-	Irrigated	5	1	26.70	23.05	25.22	20.73	21.65	253100	58320	1.30	207408	17928	1.09

	Integrated Nutrient management in Pole beans	-	Ashoka NZ	Irrigated	5	1	29.72	23.48	26.60	22.50	11.82	520000	280000	2.16	450000	200000	1.80
Flowers	Demonstration of marigold variety 'Arka Agni'	Arka Agni	-		3	0.3	Vitiated										
Ornamental																	
Fruit	Integrated Crop Management in Mango(2020-21)	Alphonso/Totapuri	-		5	2	Under Progress										
	Integrated Crop Management in Mango(2019-20)	Alphonso/Totapuri	-		5	2	120.00	112.50	115.20	98.80	16.60	288100	209080	3.64	247000	172380	3.31
	Good Horticulture practices in post harvest Handling of Mango	Alphonso	-		5	1	Results Presented in separate Table										
Spices and condiments																	
Commercial																	
Fibre crops like cotton																	
Medicinal and aromatic																	
Fodder	Demonstration of high yielding multicut Sorghum variety	CoFS-31	-	Irrigated	20	4	98.36	82.14	90.25	70.50	28.01	112812	55853	1.98	88125	39588	1.81
Plantation																	
Fibre																	
Others (pl.specify)	Intercropping of field bean under tree mulberry cropping system for additional income	-	V-1	Irrigated	5	2	92.99	69.44	81.31	81.65	45.90	243157	201657	5.86	133730	103730	4.46
Sericulture	Demonstration of fogging technology in silkworm rearing house for better cocoon productivity	-	V-1	Irrigated	5	2	97.75 (kg/100dfls)	93.45 (kg/100dfls)	95.96 (kg/100dfls)	85.03 (kg/100dfls)	12.85	42990	30490	3.43	33222	21722	2.88

	Integrated nutrient management in mulberry for higher productivity	-	V-1	Irrigated	5	2	139.15	114.99	125.36	107.21	16.97	165117	110320	3.01	130012	79362	2.56
	Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production and crop stability	-	FC2XFC1	Irrigated	5	2	93.44 (kg/100dfls)	87.66 (kg/100dfls)	90.71 (kg/100dfls)	85.40 (kg/100dfls)	6.21	35833	21781	2.55	26474	13974	2.12
Home Science	Demonstration of nutrition Garden for nutritional security in DFI villages				30	-	Results presented Separately										

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

** BCR= GROSS RETURN/GROSS COST

H – Highest Yield, L – Lowest Yield A – Average Yield

FLD on Good Horticulture Practices in Post Harvest Handling of Mango:
Results: Crop : Mango Variety: Alphonso Village: Kadadvagondanahalli, Srinivasapura Tq

Table 1: Effect of low cost ripening chamber on Ripening Time, TSS and Shelf Life

Year	Ripening Time (No. Days)		TSS (^o Brix)		Shelf life (no Days)	
	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber
2020-21	14	6	15	21	8	13
	14	6	14	22	7	12
	15	7	16	20	6	12
Avg	14	6	15	21	7	12

Sensory Evaluation (Taste, Colour, Aroma, Firmness, Texture) of mango fruits Cv. Alphonso treated in low cost ripening chamber

	Taste		Aroma		Firmness		Texture	
	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber
2020-21	Sweet	In core sour	Good	Mildly good	More soft	Less soft	Attractive but not uniformly colored	Not very attractive but uniformly colored

Table 3: B:C ratio of Low cost plastic ripening chamber

Sl. no	Year	Conventional ripening (tons)	Amount	Low cost Plastic ripening chamber	Amount
1	2020-21 Venkatesh Gowda	6.5	6500×55=357200	6.5	6500×110=715000
			360000-5850=359420		715000-15850=699150
	Net Income		699150-359420=339730,		
2	2020-21 Venkatesh Gowda	8.5	8500×50=425000	8.5	8500×105=892500
			425000-8500=416500	8.5	892500-25650=866850
	Net Income		866850-416500=390850		

Demonstration of Nutri garden for Nutritional Security of farm families

No. of Families : 30

Village: Kadadvagondanahalli, Srinivasapura Tq

Sl. No	Crop	2020-21	
		Farmers -Practice	Nutritional Garden
1	Okra (kg)	38	155.63
2	Tomato (kg)	124	139.71
3	Brinjal (kg)	58	91.17
4	Cucumber (kg)	14.5	55.42
5	Cluster Bean (kg)	17.75	36.44
6	Ridge Gourd (kg)	12.25	25.14
7	Bottle Gourd (kg)	25.25	54.68
8	Radish (kg)	24.5	48.33
9	Palak (Bundle)	10.0	17.0
10	Fenu greek (Bundle)	4.0	15.0
11	Coriander (Bundle)	17.0	25.00
12	Amaranthus(Bundle)	30.0	45.0
13	Chilli (Kg)	14.25	18.35

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check
1. Introduction of new Ragi variety KMR 630 for higher yields and drought mitigation		
a. No. of tillers	9.12	6.80
b. Plant height (cm)	80	105
c. No. of ear heads	9.64	7.28
2. Introduction of CRIDA-18 Horse gram for yield enhancement		
a. Plant height	35	30
b. No. of branches/plant	14	10
c. No. of pods/plant	55	45
d. Seeds/pod	3.5	3.2
e. %PDI	8	12
3. Tomato(Yadahalli)		
a. Plant Height	118.32	106.08
b. Thrips	1.32	2.08
c. Mites	0.84	2.08
d. Fruit borer	2.16	2.96
e. South American Pin worm	6.68	16.92
f. Late Blight disease	10.69	24.7
Tomato(Thimmasandra)		
a. Plant Height	127.16	123.04
b. Thrips	0.88	2.2
c. Mites	0.44	2.04
d. Fruit borer	2.48	5.24
e. South American Pin worm	8.52	16.16
f. Late Blight disease	14.93	27.46
4. Redgram		
a. Leaf webber incidence (No/ plant)	4.42	9.86
b. % Sterility mosaic disease	3.26	10.24
c. Pod borer incidence(%)	4.12	9.58
5. Management of yellow mosaic virus in pole bean through integrated approach		
a. Plant height (cm)	275.00	259.00
b. No. of pods per plant	50.33	42.55
c. Pod length (cm)	18.87	17.25
d. Disease incidence (%)	4.25	7.75
e. Pod yield (t/ha)	21.87	18.00
f. B:C ratio	2.92	2.62
6. Demonstration of fertigation schedule in tomato for decreasing fertilizer cost and enhance quality yield		
a. Plant height (cm)	114	109
b. No of fruits /plant	64	77
c. Weight of the fruit (g)	81	86
7. Management of late blight in potato through integrated approach		
a. Plant weight (Fresh weight)	183.05	1989.5
b. No. of tubers/plant	11.50	9.10
c. Disease incidence (LB)	9.31	29.35
8. Integrated Nutrient management in Pole beans		
a. Plant height (cm)	246	228
b. No. of pods/plant	32	28
c. Weight of fruit (g)	15	12
9. Integrated crop management in mango(2019-20)		
a. Hopper incidence/inflorescence	5.98	12.98
b. Powdery mildew incidence (% PDI)	9.48	18.82
c. Yield (t/ha)	11.52	9.88
d. B:C ratio	3.64	3.31
10. Demonstration of high yielding multi cut Sorghum variety CoFS-31		
a. Plant height (cm)	241	210
b. Number of tillers /plant	11.40	8.40
c. Number of leaves/plant	85.65	74.85
11. Integrated nutrient management in mulberry		
a. Cocoon yield(kg/ha/crop)	471.76	382.39
b. Cocoon yield(kg/100 dfls)	93.97	89.13
c. No. of branches/plant(No.)	15.8	14.56
d. No. of leaves/branches	25.76	24.36
e. Leaf moisture % (%)	76.68	75.30

12. Intercropping of field bean under tree mulberry cropping system for additional income	51.26	51.44
a. No. of braches/Plant (No)	31.68	31.84
b. No. of leaves / braches (No)	72.29	72.46
c. Leaf moisture percentage (%)	7.56	7.59
d. Intercrop yield (q/ha)	37.82	0
13. Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production		
a. Disease incidence (%)	2.76	4.99
b. Defective cocoon (%)	1.26	2.38
c. Effective rate of rearing (%)	95.55	92.12
14. Demonstration of fogging technology in silkworm rearing house for better cocoon productivity	481	562
a. No of cocoons per kg (No)	0.74	5.98
b. Disease incidence (%)	0.48	4.89
c. Defective cocoon percentage (%)		

5. B2. Feedback on technologies demonstrated

Name of technology demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Introduction of new Ragi variety KMR630 for higher yields and drought mitigation	1. KMR-360 Ragi variety recorded higher yields compared to MR-3 & 6 2. Crop maturity was recorded earlier compared to other varieties after transplanting (75 days)	
Introduction of CRIDA-18 Horse gram for yield enhancement	Introduction of CRIDA-18 performed better yield compared to local varieties	
Integrated Pest & disease management in Tomato	Integrated pest management practices reduce the pest & disease incidence & Improvement in fruit quality & yield	
Management of Yellow Mosaic Virus in Pole bean through Integrated Approach	Disease incidence was less compared to check. The quality of pods was better than the check. The farmer was impressed by biological and mechanical method of disease management	
Demonstration of high yielding multicut Sorghum variety	Fodder yield COFS-31 was recorded higher yield compared to local variety	
Intercropping of field bean under tree mulberry cropping system for additional income	1. Field bean intercrop with tree mulberry earned better returns over farmers practice 2. Problem of weeds overcome by coverage of land 3. Difference observed in leaf and cocoon yield	
Integrated nutrient management in mulberry for higher productivity	1. Mulberry leaf yield increased upto 16.977 % over farmer practice 2. Subsequent year reduce 50 % of chemical fertilizer application 3. Improvement in leaf quality of mulberry	
Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production and crop stability	1. Increases the cocoon yield 6.21% over normal practice 2. Notable decrease in the quantity of defective cocoons 3. Bivoltine cocoon price increase 85/- rupees per kg compared to cross breed	

5.B.3. Livestock and related enterprises: Nil

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Name of the parameter with unit	Yield (kg/animal)			% Increase	*Economics of demonstration Rs./unit)			*Economics of check (Rs./unit)			
						Demo				Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR	
						H	L	A								
Dairy																
Poultry																
Rabbitry																
Piggery																
Sheep and goat																
Duckery																
Others (pl. specify)																

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

** BCR= GROSS RETURN/GROSS COST

Sericulture	Intercropping of field bean under tree mulberry cropping system for additional income		5	2	Leaf Yield (q/ha/plant)	92.99	69.44	81.31	81.65	45.93	243157	201657	5.86	133730	103730	4.46
	Demonstration of fogging technology in silkworm rearing house for better cocoon productivity		5	2	Cocoon yield (kg/100 dfls)	97.75 (kg/100 dfls)	93.45 (kg/100 dfls)	95.96 (kg/100 dfls)	85.03 (kg/100 dfls)	12.85	42990	30490	3.43	33222	21722	2.88
	Integrated nutrient management in mulberry for higher productivity		5	2	Leaf Yield (q/ha/plant)	139.15	114.99	125.36	107.21	16.977	165117	110320	3.01	130012	79362	2.56
	Introduction of bivoltine double hybrid Krishnara ja for quality cocoon production and crop stability		5	2	Cocoon yield (kg/100 dfls)	93.44 (kg/100 dfls)	87.66 (kg/100 dfls)	90.71 (kg/100 dfls)	85.40 (kg/100 dfls)	6.21	35833	21781	2.55	26474	13974	2.12
Apiculture																
Others (pl. specific)																

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

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

FLD on Good Horticulture Practices in Post Harvest Handling of Mango:

Results: Crop : Mango Variety: Alphonso Village: Kadadvagondanahalli, Srinivasapura Tq
Table 1: Effect of low cost ripening chamber on Ripening Time, TSS and Shelf Life

Year	Ripening Time (No. Days)		TSS (^o Brix)		Shelf life (no Days)	
	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber
2020-21	14	6	15	21	8	13
	14	6	14	22	7	12
	15	7	16	20	6	12
Avg	14	6	15	21	7	12

Table 2: Sensory Evaluation (Taste, Colour, Aroma, Firmness, Texture) of mango fruits Cv. Alphonso treated in low cost ripening chamber

	Taste		Aroma		Firmness		Texture	
	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber	Conventional Ripening	Ripening chamber
2020-21	Sweet	In core sour	Good	Mildly good	More soft	Less soft	Attractive but not uniformly colored	Not very attractive but uniformly colored

Table 3: B:C ratio of Low cost plastic ripening chamber

Sl. no	Year	Conventional ripening (tons)	Amount	Low cost Plastic ripening chamber	Amount
1	2020-21 Venkatesh Gowda	6.5	6500×55=357200	6.5	6500×110=715000
			360000-5850=359420		715000-15850=699150
	Net Income		699150-359420=339730,		
2	2020-21 Venkatesh Gowda	8.5	8500×50=425000	8.5	8500×105=892500
			425000-8500=416500	8.5	892500-25650=866850
	Net Income		866850-416500=390850,		

Demonstration of Nutri garden for Nutritional Security of farm families

No. of Families : 30

Village: Kadadvagondanahalli, Srinivasapura Tq

Sl No	Crop Name	2020-21	
		Farmers -Practice	Nutritional Garden
1	Okra (kg)	38	155.63
2	Tomato (kg)	124	139.71
3	Brinjal (kg)	58	91.17
4	Cucumber (kg)	14.5	55.42
5	Cluster Bean (kg)	17.75	36.44
6	Ridge Gourd (kg)	12.25	25.14
7	Bottle Gourd (kg)	25.25	54.68
8	Radish (kg)	24.5	48.33
9	Palak (Bundle)	10.0	17.0
10	Fenu greek (Bundle)	4.0	15.0
11	Coriander (Bundle)	17.0	25.00
12	Dantu (Bundle)	30.0	45.0
13	Chilli (Kg)	14.25	18.35

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

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Local
1. Tomato (Yadahalli)		
a. Plant Height	118.32	106.08
b. Thrips	1.32	2.08
c. Mites	0.84	2.08
d. Fruit borer	2.16	2.96
e. South American Pin worm	6.68	16.92
f. Late Blight disease	10.69	24.7
Tomato(Thimmasandra)		
a. Plant Height	127.16	123.04
b. Thrips	0.88	2.2
c. Mites	0.44	2.04
d. Fruit borer	2.48	5.24
e. South American Pin worm	8.52	16.16
f. Late Blight disease	14.93	27.46
2. Redgram		
a. Leaf webber incidence (No/plant)	4.42	9.86
b.% Sterility mosaic disease	3.26	10.24
c.Pod borer incidence(%)	4.12	9.58
2. Intercropping of field bean under tree mulberry		
a. Intercrop yield(q/ha)	37.80	0
b. No. of branches/plant(No.)	51.26	51.44
c. No. of leaves/branches	31.68	31.84
d. Leaf moisture %(%)	72.29	72.46
e. Cocoon yield(kg/ha)	370.56	382.08
3. Integrated nutrient management in mulberry		
a.Cocoon yield(kg/ha/crop)	471.76	382.39
b.Cocoon yield(kg/100 dfls)	93.97	89.13
c.No. of branches/plant(No.)	15.8	14.56
d.No. of leaves/branches	25.76	24.36
e.Leaf moisture %(%)	76.68	75.30
4. Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production		
a. Disease incidence (%)	2.76	4.99
b. Defective cocoon (%)	1.26	2.38
c. Effective rate of rearing (%)	95.55	92.12

5. B8. Feedback on enterprises demonstrated

Name of enterprise demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption

5.B.9. Farm implements and machinery

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

* 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 laboursaved (viz., reduction in drudgery, time etc.)

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

Cucumber																
Tomato																
Brinjal																
Okra																
Onion																
Potato																
Field bean																
Others (pl. specify)																
Total																
Commercial crops																
Sugarcane																
Coconut																
Others (pl. specify)	Integrated insect pest and disease management in Tomato	Saho/1030	5	1	72.5	63.0	65.92	48.95	34.66	692160	469700	3.11	513975	297615	2.37	
			5	1	61.5	57.5	60.52	47.3	27.94	559810	340210	2.55	437525	224025	2.04	
	Management of Yellow Mosaic Virus in Pole bean through Integrated Approach	Ashoka NZ	5	1	23.50	20.25	21.87	18.00	21.50	437400	287400	2.92	360000	222500	2.62	
	Demonstration of fertigation schedule in tomato for decreasing fertilizer cost and enhance quality yield	Saho	5	1	86.75	64.85	75.80	85.30	-13.33	750000	510000	3.12	850000	570000	3.03	
Fodder crops																
Maize (Fodder)																
Sorghum (Fodder)	Demonstration of high yielding multicut Sorghum variety	CoFS-31	20	4	98.36	82.14	90.25	70.50	28.01	112812	55853	1.98	88125	39588	1.81	
Others (pl. specify)	Intercropping of field bean under tree mulberry cropping system for additional income	V-1	5	2	92.98	69.44	81.27	81.60	45.93	243175	201657	5.86	133728	103728	4.46	

Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	1	35	5	40	10	0	10	45	5	50
Integrated water management	1	30	0	30	10	0	10	40	0	40
Integrated nutrient management	1	34	0	34	6	0	6	40	0	40
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	1	35	0	35	5	0	5	40	0	40
Nutrient use efficiency	1	32	0	32	8	0	8	40	0	40
Balanced use of fertilizers										
Soil and water testing	1	40	0	40	10	0	10	50	0	50
Others (pl.specify)	3	88	12	100	5	0	5	93	12	105
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	1	0	1	29	0	29	30	0	30
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	0	10	10	0	5	5	0	15	15
Women empowerment	1	0	15	15	0	10	10	0	25	25
Location specific drudgery production										
Rural Crafts										
Women and child care	1	8	56	64	24	6	30	32	62	94
Others (pl.specify)										
Sericulture	1	150	25	175	10	0	10	160	25	185
Organic sericulture	1	50	25	75	0	0	0	50	25	75
Silkworm cropping	1	40	5	45	10	0	10	50	5	55
Uzifly	1	35	2	37	5	0	5	38	5	43
Crop production	1	75	0	75	10	0	10	85	0	85
silkworm	1	40	0	40	10	0	10	50	0	50

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	2	75	0	75	15	0	15	90	0	90

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security	1	4	5	9	6	5	11	10	10	20
Any other (Wheather Forecast)	1	45	1	46	75	4	79	120	5	125
Total	2	49	6	55	81	9	90	130	15	145

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIAL (2020)**9.A. Production of seeds by the KVKs**

Crop category	Name of the crop	Name of the Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)					
Oilseeds					
Pulses					
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others (specify)	Grain Amaranthus	Suvarna	0.15	6000	2
Total					

9.B. Production of hybrid seeds by the KVKs

Crop category	Name of crop	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Total					

9.C. Production of planting material by the KVKs

Crop category	Name of the crop	Variety	Number	Value (Rs.)	Number of farmers to whom provided
Commercial	Mulberry	V-1	4520	18,080	7
Vegetable seedlings	Drumstick	Bhagya	20,432	2,04,320	72
Fruits					
Ornamental plants					
Medicinal and Aromatic					
Plantation					
Spices	Curry leaf	local	442	5,304	6
Tuber					
Fodder crop saplings					
Forest Species					
Others(specify)					
Total					

9.D. Production of hybrid planting materials by the KVKs

Crop category	Name of crop	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Total					

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	Waste decomposer	1015	5075	106
Others (specify)				
Total		1015	5075	106

9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

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

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

(A) KVK Newsletter: 3 issues

Date of start: 1.4.2020 Periodicity: (April-June 2020, July-Aug 2020 & Sep-Dec-2020)

Copies printed in each issue: e-News letter (Sent through e-mails)

(B) Literature developed/published

Item	Number
Research papers- International	-
Research papers- National	9
Technical reports	-
Technical bulletins	2
Popular articles - English	-
Popular articles – Local language	13
Extension literature(Folders)	5
Others (Pl. specify)	-
Compendium	2
TOTAL	16

10.B. Details of Electronic Media Produced


S. No.	Type of media	Title	Details
1.	CD / DVD	1. Doubling of Farm Women' Income through value addition of Minor Millet 2. Empowerment of Rural woman through ready to cook products entrepreneurship 3. Integrated farming system for sustainable income generation 4. KVK, Kolar- A glance	Duration- 7 min.38 sec Duration- 7 min 24 sec Duration- 7 min Duration 10 min
2.	Mobile Apps	-	-
3.	Social media groups with KVK as Admin	Whats app group	
4.	Facebook account name	kvkkolar2012@gmail.com	
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).

Title	Waste decomposer microbial consortia - a promising compost culture for recycling of sericulture farm residue to enhance the farmers income
Background	Karnataka is the premier state which contributes around 50% of the total silk production in India. Kolar district is famous for silk production in the state. It has become a good source for economic upliftment of rural people in view of its fast income generating nature. It has been estimated that from one hectare of mulberry farm, about 20-25 MT of sericulture waste is generated yearly in the form of silkworm rearing waste and other farm wastes which is equivalent to 280-300 Kg of nitrogen, 90-100 Kg of phosphorus and 150-200 Kg of potash. Further, the mulberry shoots normally take 9-12 months for decomposition. Proper usages of these raw materials as organic manure in short period can substantially bring down the expenditure on chemical fertilizers.
Technology	Scientific composting technology brings down the cost of cultivation as well as to improve the soil health and crop yield. The National Centre of Organic Farming, Ghaziabad developed a product called Waste Decomposer microbial consortia. It is a consortium of few beneficial microorganisms excellent source for lignocelluloses degradation with more robust growth and faster secretion of lignocelluloses-decomposing enzymes with better pH tolerance. The mass multiplied solution of waste decomposer is used to decompose sericulture farm residue/bio-waste into organic manure in short period.
Intervention	The present On farm testing has been taken up in the three farmers field to know the suitable microbial consortia for composting of sericulture farm residue assessed by Krishi Vigyan Kendra Kolar at Chitnahalli and Kadudevandahalli villages during 2019-20, 2020-21. Further, conducted several training programmes to address the crop residue management, production of good quality compost in short period, income related issues in a view to spread the technology.
Impact	Before intervention of the technology most of the sericulture farmers in the villages were dumping the sericulture farm residue in road side or compost pit, due to slow decomposition process sometimes burnt the material also. After intervention of composting of sericulture farm residue with different compost culture, farmers are getting compost yield 889.60 kg/ton and obtaining compost yield upto 22.32 t/ha/year through waste decomposer microbial culture solution. Further it takes 77 days for decomposition of seri residue compare to other compost cultures. Similarly, in farmer practice the decomposition of crop residue takes upto 281 days and compost yield recorded 3.62 t/ha/year, respectively. Around 18.72 tons of compost produced in one hectare of mulberry per year over farmer practice.
Horizontal Spread	In the year 2019-20 & 2020-21 the technology was tried through OFT by KVK, Kolar covering 3 ha area and there was upsurge in area of up to 200 ha covering 500 farmers in the year 2020-21 throughout the district by adopting the technology which is popularized through training programmes and field day organized by KVK, Kolar in collaboration with department of sericulture Kolar.
Economic gains	The benefit cost ratio was recorded as 14.37 compare to farmer practice 3.63. Further, net return obtained from compost produced through waste decomposer microbial consortia obtained Rs. 42140 per hacter per year compare to farmer practice Rs. 5260. These features make this technology unique and highly efficient to convert all types of waste into good compost within a shorter period of 80-90 days

Photos



Title	Crop intensification for sustainable production and income through tree mulberry based cropping system
Background	Karnataka is the leading sericulture state which contributes around 50% of the total silk production in India. It is the most important commercial crop with high returns in the short duration. Kolar district is famous for silk production in the state and around 19,005 families are engaged in silkworm rearing. Out of this, 73.02 % families belong to small and marginal farmers category. The total cocoon production in the district is 10,950 MT. In recent years, due to inadequate rainfall, depletion of underground water table and continuous drought made it difficult in sustaining mulberry leaf production as well as silkworm rearing.
Technology	The technology developed by CSRTI, Mysore consisting of cultivation of mulberry in tree method under dry land condition and utilizing inter space with suitable rainfed crops during Kharif season to realize additional income has been taken up in the farmers field through On Farm Testing (OFT) by Krishi Vigyan Kendra, Kolar at Parshwaganahalli and Venugopalapura villages during 2017-18 and 2018-19 and also conducted several training programmes to address water management, yield, intercrops and income related issues in a view to spread the technology.
Intervention	The technology developed by CSRTI, Mysore consisting of cultivation of mulberry in tree method under dry land condition and utilizing inter space with suitable rainfed crops during Kharif season to realize additional income has been taken up in the farmers field as an on farm testing by Krishi Vigyan Kendra, Kolar at Parshwaganahalli and Venugopalapura villages during 2017-18 and 2018-19 and also conducted several training programmes to address water management, yield, intercrops and income related issues in a view to spread the technology.
Impact	Before intervention of the technology most of the sericulture farmers in the villages were cultivating mulberry in tree method for foliage and cocoon production only. After intervention of growing suitable intercrops under tree mulberry plantation, farmers are getting foliage production of 6.85 t/ha, 7.92 t/ha and 7.61 t/ha/crop from finger millet, groundnut and field bean intercrops compare to tree mulberry sole crop (7.95 t/ha/crop). Besides, intercrops yield recorded 17.26 q/ha, 10.37 q/ha and 35.52 q/ha from finger millet, groundnut and filed bean, respectively.
Horizontal Spread	In the year 2017-18 & 2018-19 the technology was tried through OFT by KVK, Kolar covering 3 ha area and there was upsurge in area of up to 50 ha covering 125 farmers in the year 2018-19 by adopting the technology which is popularized through training programmes and field day organized by KVK, Kolar in collaboration with department of sericulture Kolar.
Economic gains	The benefit cost ratio was recorded as 5.56, 3.92 and 4.34 in field bean, finger millet and ground nut intercrops compare to tree mulberry sole crop 5.11. Further, net return obtained from finger millet (Rs. 1,08,873), Groundnut (Rs. 1,33,044) and Field bean (Rs.1,69,986) compare to tree mulberry sole crop (Rs. 1,02,832). Farmers obtained additional income of Rs. 15727, Rs. 40743 and Rs. 66966 from finger millet, groundnut and filed bean grown as intercrop under tree mulberry during kharif season.
Photos	



Title	Doubling of farmers income by using Low cost ripening chamber for ripening of Mangoes
Background	Mango (<i>Mangifera indica</i> L.) is an important fruit crop in India and popularly called the 'king of fruits'. Approximately 50 per cent of all tropical fruits produced worldwide are Mangoes. Mango is the most widely cultivated fruit in India. India is the major Mango growing country, contributing nearly 49.62 per cent of world's area and 42.06 per cent of world's production, respectively. Lack of suitable marketing avenues and channels decreases the margin for the Mango growers. Mango is cultivated throughout Kolar District. However, the large scale cultivation of mango is concentrated in Srinivaspur taluk, contributed about 22,325 ha of area and 81,100 tonnes of production in the district. Hence, Srinivaspur taluk was selected for the study. As producers do not generally undertake wholesale distribution, it is a common practice to lease out the orchards who take care of watch and ward of the crop till maturity and then dispose the produce as it suits them. Hence, Low cost ripening chamber has been demonstrated to farmers to ripen and marketing of mangoes at Mango mela at Lalbagh.
Technology	The technology developed by IHR, Bengaluru is used for demonstration to farmers. In this, small quantity of alkali (sodium hydroxide) is added to ethereal to release ethylene gas and fruits are exposed to liberated gas in air tight tents of known volume. After 24 hrs of exposure, fruits are taken out for completion of ripening process at the room temperature, Mango fruits exposed to 100 ppm ethylene gas for 24 hrs could ripen in 5 days as compared to the ripening in 12-15 days of the non treated control fruits without adversely affecting quality. Its best alternative to calcium carbide ripening which is carcinogenic.
Intervention	This technology has been demonstrated as an Field level Demonstration (FLD) by Krishi Vigyan Kendra, Kolar at Rampura, Gundamantha and Kadadevandalhi villages of Srinivasapura Tq, during 2017-18, 2018-19 and 2019-20 and also conducted several training programmes and field days to promote and spread the technology to farmers
Impact	Normally farmers are practicing conventional ripening method like using paddy and Ragi straw. But this method takes minimum 12 to 15 days for ripening. By this method farmers are normally used for household consumption. By intervention of this technology to farmers can able to ripen more than 4-5 tons in 5-6 days same time farmers can able to sale ripened mangoes at commercial level. In the year 2016- 17, Mr Ashok Kumar has ripened nearly 9 tons by conventional ripening because high demand he couldn't able to supply required quantity of mangoes but in the year 2017-18, ICAR-KVK Kolar has demonstrated Low cost ripening chamber so this farmers can able to ripen nearly 12 tons in the year 2017-18 and 32 Tons in the year 2018-19 so this method helps the farmers can able to ripen more quantity of Mangoes. In the year 2018-19, Mrs Rathnamma, has ripened nearly 3 Tons of Mangoes in the year 2018-19. In the year 2019-20 and 2020-21, Mr Venkatesh and Mr Venkatesh Gowda have both Mango orchard but they are usually lease the orchard. Hence this technology has been demonstrated to ripen Mangoes. By this method these farmers has been ripened 6.5 and 8.5 Tons.
Horizontal Spread	Now these farmers are effectively utilized the technology for ripening of more quantity of mangoes simultaneously nearly more than 15-20 farmers are utilizing the technology for ripening of Mangoes. These farmers are sale ripened Mangoes at Mango Mela, Lalbagh, Bengaluru and UAS Bengaluru Stall.
Economic gains	The farmers will get additional cost minimum Rs. 10-15/- each per kg of ripened Mangoes by this method. The benefit cost ratio was recorded as 3.25, 3.10 and 2.85. Further, income obtained from their Mango Rs. 45000-50000/-. Farmers obtained additional income of Rs. 85000-95000/- per acre additional income if they have ripened and sold by themselves.

<p>Photos</p>			
			
			

<p>Title</p>	<p>Economic empowerment of Women by establishment of Papa Dins Pizza and Burger unit at KGF</p>
<p>Background</p>	<p>One month training programme on “Agro And Food Processing” was conducted from nov.4.2020 to Dec. 04.2020 at ICAR KVK , Kolar in collaboration with CEDOK Bengaluru. In this training we are trained and conducted hands on training on preparation of different value added products from agriculture and Horticulture crops. In this connection Simpu W/o Dinesh Ramanna, age 42, KGF has started PAPANIN’s Pizza and Burger unit at KGF.</p>
<p>Technology</p>	<p>The technology developed by UAS, bakery training unit , Bengaluru for preparation of pizza base technology was used for demonstration . In this product good quality wheat flour was used for preparation of pizza base because normally maida is used for preparation pizza base. Organic capsicum is used for preparation of Pizza.</p>
<p>Intervention</p>	<p>After training programme KVK kolar has helped to purchase required equipments to prepare Pizza and Burger, FSSAI certificate and required good packaging material for packing the products.</p>
<p>Impact</p>	<p>Normally people are consuming burger from dominions and burger king. That type of shops is usually situated in metropolitan cities and district place. Hence, this shop helps to get good quality pizza and burger at economical cost. Now daily more than 280 to 300 pizzas and 350 to 400 burger has been selling. Main advantage of this shop they started home delivery around radius of 8 km its highly beneficial to consumers.</p>

Horizontal Spread	Now demand of the pizza and burger has been increased.		
Economic gains	She will spend production of per piece of Pizza and Burger around Rs.60/- and Rs.25/- Simpu Dinesh obtained additional income of Rs55000-65000/- income per month.		
Photos			
			

10.D. Give details of Innovative Methodology or Innovative Approach of Transfer of Technology developed and used during the year

10.E. Give details of Indigenous Technical Knowledge 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	Scientific Rationale

10 F. Technology Week celebration during 2020:

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)			

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
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			

10 E. Recognition and Awards: Please give details about National and State level recognition and awards

PART XI – SOIL AND WATER TEST

11.1 Soil and Water Testing Laboratory

A. Status of establishment of Lab : Soil Science lab of College of Horticulture is being utilized

1. Year of establishment : 2010
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost	Status
1				
2				
3				
Total				

B. Details of samples analyzed since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	3080	3080	20827	616000
Water Samples	2028	2028	1887	405600
Plant samples				
Manure samples	0	0	0	
Others (specify)	0	0	0	
Total	5108	5108	22714	1021600

C. Details of samples analyzed during the 2019:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	323	323	295
Water Samples	295	295	295
Plant samples			
Manure samples			
Others (specify)			
Total	618	618	590

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1.	25.3.2017	

B. Details of soil samples analyzed during 2019 and since establishment with Mobile Soil Testing Kit:

	During 2019	During 2020	Cumulative progress (Total)
Samples analyzed (No.)	40	10	50
Farmers benefited (No.)	40	10	50
Villages covered (No.)	30	10	40

11.3 Details of soil health cards issued based on SWTL & Mobile Soil Testing Kit during 2020:

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	2020	285	273	273	273
Mobile Soil Testing Kit	2020	10	20	20	20

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	120	-	-	Mrs. V.D. Roopa Devi Joint Director, KSDA, kolar Mrs. Pankaja, Deputy Director, KSDA, kolar	10	News paper 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 income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

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

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
KSDA	Training programmes, diagnostic field visits, surveys, meetings etc
KSDH	Training programmes, diagnostic field visits, surveys, meetings etc
Veterinary & Animal husbandry	Training programmes, diagnostic field visits, surveys, meetings etc
Sericulture	Training programmes, diagnostic field visits, surveys, meetings etc
Karnataka Milk Federation	Training programmes, diagnostic field visits, surveys, meetings etc
Dept. of Fisheries	Meetings etc
MANAGE, Hyderabad & SAMETI, (South), UAS, Bangalore	DAESI programme

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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.)
Enhancing farmers income and welfare	2016-17	KAPC	10 lakhs
Enhancing farmers income and welfare	2017-18	KAPC	05 lakhs
Enhancing farmers income and welfare	2018-19	KAPC	10 lakhs

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				
02	Research projects	Training cum incubation unit for Entrepreneurs in processing of Amla at KVK, Kolar	-	1	
03	Training programmes				
04	Demonstrations	Minor millets Mela	1		
05	Extension Programmes				
		Kisan Mela			
		Technology Week			
		Exposure visit			
		Exhibition			
		Soil health camps			
		Animal Health Campaigns			
		Others (Pl. specify)			
06	Publications				
		Video Films			
		Books			
		Extension Literature			
		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

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

Spices & Plantation crops									
Floriculture									
Chrysanthemum	18.2.2020	2.9.2020	0.02	Marigold	Flower	78.5 kg	-	5177	NIL
Fruits									
Vegetables									
Curry leaf	2016	29.1.2020	0.01	Suvasini	Leaves	29 kg	-	820	NIL
Coriander leafy vegetable	8.9.2020	3.11.2020	0.02	Local	Leaves	55 kg	-	1280	NIL
Fenugreek leafy vegetable	8.9.2020	6.10.2020	0.01	Local	Leaves	3.5 kg	-	140	NIL
Amaranthus leafy vegetable	21.9.2020	9.12.2020	0.02	Local	Leaves	33.75 kg	-	1350	NIL
Palak leafy vegetable	15.10.2020	11.12.2020	0.02	Local	Leaves	26.75 kg	-	1070	NIL
Dill leafy vegetables	15.10.2020	11.12.2020	0.01	Local	leaves	14 kg	-	560	NIL
Raddish root vegetable	30.10.2020	29.12.2020	0.04	Local	Root	15 kg	-	150	NIL
Others (specify)									
Sunhemp	28.6.2020	8.11.2020	0.50	Local	Seeds	120 kg	-	8400	NIL
Multicut Fodder Sorghum-COFS-31	13.7.2020	21.11.2020	0.20	COFS-31	Seeds	50 kg	-	20000	NIL

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Waste Decomposer	1015	20300	25375	NIL

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	

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)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

15.10 SCSP

Farmer Training		Women Farmer Training		Rural Youths		Extension Personnel		OFT (No of Technologies)	Number of farmers involved			Participants in extension activities (No.)	Production of seed (q)	Production of Planting material (Number in lakh)	Production of Livestock strains (Number in lakh)	Production of fingerlings (Number in lakh)	Testing of Soil, water, plant, manures samples (Number)
No. of Trainings/Demos	No. of Farmers	No. of Trainings/Demos	No. of Women Farmers	No. of Trainings/Demos	No. of Youths	No. of Trainings/Demos	No. of Ext. Personnel		On-farm trials	Frontline demos	Mobile agro-advvisory to farmers						
2	100	1	20	2	70	-	-	-	-	190	5	100	-	-	-	-	-

Implementation of SCSP Programme at KVK, Kolar.

1.	Name of the Centre	:	KVK, Kolar
2.	Start of SCSP Programme at the Centre (give month and year)	:	October - 2020
3.	Details of SCSP Village (s) adopted under	:	Village(s): Chokkareddipalli & Kadudevandahalli
		:	Block: Srinivasapura
		:	District: Kolar
4.	Technological Interventions like demonstrations and training programmes proposed		

Sl. No	Name of the Technology	Components	Number of Demos/ Training	Stage of the activity
1.	Demonstration of dry land horticulture fruit crops	Five each saplings of Jamun, Amla, Custard apple, Jackfruit and Lime for each farmer	25 (10 ha)	Under progress
2.	Introduction of multicut fodder sorghum for sustained fodder availability	COFS-31 (500 gm)	40(8 ha)	Under progress
3.	Integrated crop management in Mango	Sunhemp (10kg) Fruitfly traps & Lures (4+3 nos) Mango Special (6kg) Pruning Saw (1 no) Hexaconazole (500ml) Thiamethoxam (250 gm) Wettable sulphur (1 kg) Lambda cyalhothrin (250 ml)	30 (12 ha)	Under progress
4.	Demonstration of Hygienic milk production through cow mats	cow mats	35 No	Distributed cow mats
5.	Introduction of improved poultry birds for additional income	Swarnadhara chicks	50	Distributed chicks
6.	Training on improved cultivation practices for	1 day training	02	Organized

	higher yields in mango with special emphasis on organic cultivation and exploring market avenues			
7.	Integrated crop management in solonchious crops	1 day training	01	Organized
8.	Preparation of bio crafts for additional income generation for adolescent girls (Rural youth)	5 days training	01	Organized
9.	Training cum Animal health camp for addressing common diseases in livestock	1 day programme	02	Organized
10.	Demonstration of Scientific pruning of mango orchards for better growth and yields	Pruning saw	55	Distributed
11.	Demonstration and installation of vermicompost units for better utilization of organic waste	Vermicompost bags	10	Distributed

15.11 NARI

Activity	Achievement	
	Number of activity	No. of farmers/ beneficiaries
OFTs – Nutritional Garden (activity in no. of Unit)		
OFTs – Bio-fortified Crops (activity in no. of Unit)		
OFTs – Value addition(activity in no. of Unit/Enterprise)		
OFTs - Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
FLDs – Nutritional Garden (activity in no. of Unit)	1	30
FLDs – Bio-fortified Crops (activity in no. of Unit)		
FLDs – Value addition(activity in no. of Unit/Enterprise)	2	06
FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
Trainings		
Extension Activities		

15.12 KVK Portal

No. of Events added by KVKs	No. of Facilities added by KVKs	Filled Report on Package of Practices (Y/N)				Filled Profile Report (Y/N)							
		Crop	Livestock	Fisheries	Horticulture	Employees	Posts	Finance	Soil Health Cards	Applications	Crops	Resources	Fish
928	5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

15.13 KSHAMTA

Number of Adopted Villages	No. of Activities		No. of farmers benefited	
	Demo	Training	Demo	Training

15.14 DFI

Sl	District	Taluks	Villages	Farmer s (No.)	Average Benchmark Income (Rs/year)	Crops/enterprises	KVK Interventions	Additional Net Income generated due to KVK interventions (Rs/year)	Total income of farmer (Rs/year)
1	Kolar	Kolar	Yadahalli	50	331730.66	Ragi, Mulberry, Tomato, Potato, Marigold, Nutritional security, Fodder sorghum	1. Introduction of new Ragi variety KMR630 for higher yields and drought mitigation 2. Integrated nutrient management in mulberry for higher productivity 3. Integrated insect pest and disease management in Tomato 4. Management of late blight in potato through integrated approach 5. Demonstration of marigold variety 'Arka Agni' 6. Demonstration of nutrition Garden for nutritional security in DFI villages 7. Demonstration of high yielding multicut Sorghum variety 8. Demonstration of fertigation schedule in tomato for decreasing fertilizer cost and enhance quality yield		
2	Kolar	Srinivaspura	Kadudevandahalli	50	128321.91	Sericulture, Mulberry, Silkworm rearing, Fodder sorghum	1. Assessment of different compost culture in composting of Seri farm residue 2. Assessment of management of uzifly in silkworm rearing 3. Intercropping of field bean under tree mulberry cropping system for additional income 4. Demonstration of fogging technology in silkworm rearing house for better cocoon productivity 5. Integrated nutrient management in mulberry for higher productivity 6. Introduction of bivoltine double hybrid Krishnaraja for quality cocoon production and crop stability		
3	Kolar	Bangarpet	Thimmasandra	12	7972.166	Ragi, Horsegram, Tomato, Fodder sorghum	1. Introduction of CRIDA-18 Horse gram for yield enhancement 2. Demonstration of high yielding multicut Sorghum variety 3. Integrated Crop Management in Mango 4. Good Horticulture practices in post harvest Handling of Mango		
4	Kolar	Malur	Thippasandra	17	40729	Pole beans, Cauliflower, Ridge gourd, Nutritional security, Tomato, Potato, Beans	1. Assessment on management of yellow mosaic in Ridge gourd 2. Management of Yellow Mosaic Virus in Pole bean through Integrated Approach 3. Demonstration of nutrition Garden for nutritional security in DFI villages		

PART XVI - FINANCIAL PERFORMANCE

16A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	SBI	Bagalkot	17867	Current a/c	30611531173	587002104	SBIN0017867
With KVK	SBI	Kolar	6029	Current a/c	34004434216	563002101	SBIN006029

16B. Utilization of KVK funds during the year 2020-21(Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	118.00		1,18,37,992/-
2	Traveling allowances	1.25		81,740/-
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.50	1,08,73,679/-	1,39,960/-
B	POL, repair of vehicles, tractor and equipments	2.25		1,75,293/-
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.00		99,855/-
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.75		39,532/-
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	3.00		20,3585/-
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.52		30,628/-
G	Integrated farming system(IFS)	-		
H	Training of extension functionaries	0.25		24,448/-
I	Extension activities including world soil health day	0.25		20,000/-
J	Farmers field school	-		
K	EDP(2 Nos.)/Innovative activities	0.25		
L	Soil & water testing & Issue of soil health cards	0.25		26,948/-
M	Maintenance of buildings	-		
N	Nutrigardens	0.27		24,274/-
O	Library	0.05	-	
TOTAL (A)				-
B. Non-Recurring Contingencies				
1	Works	103.71		77,65,192
2	Equipment including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		233.30		20469447

16C. Status of revolving fund (Rs. in lakh) for the last three years

Year	Opening balance as on 1 st January	Income during the year	Expenditure during the year	Net balance in hand as on 31 st December of each year
January to December 2018	979912	577618	236998	1320532
January to December 2019	1320532	319365	403155	1236742
January to December 2020	1236742	473028	263843	1445927

17. Details of HRD activities attended by KVK staff

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. Anil Kumar	Scientist(SS&AC)	Online International Training Course on Conservation Agriculture based Crop Management Technologies from	ICAR-National Agricultural Higher Education Programme (NAHEP) Centre for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM), Mahatma Phule Krishi Vidyappeth, Rahuri Tal. Rahuri 413 722, Dist. Ahmednagar (Maharashtra)	18 th to 22 nd May
Dr. Anil Kumar	Scientist(SS&AC)	Online training course on "Advances in Smart Food Processing Technologies" from 04-15 June, 2020	Centre for Advanced Agricultural Science and Technology (CAAST) on Climate-Smart Agriculture and Water Management (CSAWM) under the World Bank aided National Agricultural Higher Education Programme (NAHEP) of the Indian Council of Agricultural Research (ICAR), New Delhi.	04 th -15 th June, 2020
Dr. Ambika D.S Dr. K.R. Shashidhar Mrs. Swathi G.R.	Scientist (Plant Protection) Scientist (Sericulture) SMS(Agrometology)	Online MOOCs programme on Cyclone Management	MANAGE Hyderabad	27 th July to 5 th August 2020
Dr. Ambika D.S Dr. K.R. Shashidhar Dr. Chikkanna G.S. Mrs. Swathi G.R.	Scientist (Plant Protection) Scientist (Sericulture) Scientist(Home Science) SMS(Agrometology)	Online MOOCs programme on Market – led Extension	MANAGE Hyderabad	14 th to 23 rd August 2020
Dr. K.R. Shashidhar Dr. Chikkanna G.S. Mrs. Swathi G.R.	Scientist (Sericulture) Scientist(Home Science) SMS(Agrometology)	Online MOOCs programme on Risk Mitigation in Agriculture	MANAGE Hyderabad	17 th to 24 th August 2020
Dr. Ambika D.S	Scientist (Plant Protection)	Onfarm production of bio-control agents & Microbial bio-pesticides	NIPHM, Hyderabad	14 th to 18 th September 2020
Dr. Ambika D.S	Scientist (Plant Protection)	Fruit Fly: Surveillance & Management	NIPHM, Hyderabad	21 st to 25 th September 2020
Mrs. Swathi G.R.	SMS(Agrometology)	Preparation & dissemination of Agromet advisories at block level under GMS scheme	IMD, New Delhi	24 th to 30 th September

Dr. K.R. Shashidhar	Scientist (Sericulture)	21 Days MOOC Online course on “Information Handling Skills for Teaching, Learning & Research”	PJTSAU Hyderabad	26 th August to 16 th September 2020
Dr. K.R. Shashidhar Miss. Swathi	Scientist (Sericulture) SMS(Agrometology)	5 Days Online training programme on “Impact of climate change on Pests”	NIPHM Hyderabad	07 th to 11 th September 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	5 Days Online training programme on “On Farm production of biocontrol agents and microbial biopesticides”	NIPHM Hyderabad	14 th to 18 th September 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	21 Days online mode National Training Course on Technology Interventions Towards Transformation Agriculture, Sericulture, Animal Husbandry and Allied Sectors into Sustainable Enterprises for Atmanirbhar Bharat”	Central Sericultural Research & Training Institute (CSRTI), Mysuru, Karnataka and Agro Environmental Development Society (AEDS), India	11 th August to 31 st October 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	10 days Faculty development programme on “Revolution of technology, Modern fitness trends, nutrition and challenges in physical education and sports”	UHS Bagalkot & College of Horticulture, Munirabad	12 th August to 23 rd October 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	5 Days Online training programme on “Pesticide application techniques and safety measures”	NIPHM Hyderabad	19 th to 23 rd October 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	5 Days Online training programme on “Rodent Pest Management”	NIPHM Hyderabad	26 th to 30 th October 2020
Mrs. Swathi	SMS(Agrometeology)	Remote sensing & Geographical information system in Agriculture	NIPHM Hyderabad	16 th to 28 th October 2020
Mrs. Swathi	SMS(Agrometeology)	Revolution of technology modern fitness trends, Nutrition & challenges in physical education & sports	COH, Munirabad, Koppal	12 th to 23 rd October 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	Integrated soil nutrient and rhizosphere management	NIPHM, Hyderabad	7 th – 11 th December 2020
Dr. Ambika D.S Dr. K.R. Shashidhar	Scientist (Plant Protection) Scientist (Sericulture)	Recent advances in Entomology-New Dimensions to invigorate the insect pest management	Department of Entomology, University of Horticulture Sciences, Bagalkot & CoH, Bidar	7 th – 18 th December 2020
Dr. K.R. Shashidhar	Scientist (Sericulture)	Indian international Science Festival - 2020	Ministry of Science and Technology & CSIR	22 nd -25 th December 2020

Mrs. Swathi	SMS(Agrometeology)	Accounting for climatic risk in crop yield modeling	Department of Agricultural Meteorology, BACA & Center for Agricultural intelligence, Anand Agricultural university, Gujarat	7 th to 11 th December2020
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18. **Please include any other important and relevant information which has not been reflected above (write in detail). Like details regarding FPO formation, Achievements during COVID-19 lockdown period.**