ICAR-KRISHI VIGYAN KENDRA, HIREHALLI TUMAKURU DISTRICT

ANNUAL REPORT 2020

(FOR THE PERIOD FROM 01 JANUARY 2020 TO 31 DECEMBER 2020)

ICAR-KRISHI VIGYAN KENDRA
Hirehalli, NH-48, Tumakuru District
Karnataka - 572168

ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH
Hesaraghatta Lake Post
Bengaluru – 560089, Karnataka.

GENERAL INSTRUCTIONS

Please read the following instructions very carefully before starting preparation of the report.

- Annual report is the most important document for the KVK and it directly reflects the overall achievements pertaining to the reported period. Hence due care needs to be given by each KVK while preparing the report.
- Period of Report is from 01 January, 2020 to 31 December, 2020.
- Action photographs with relevant captions covering all OFTS/FLDS/TRAINING/EXTENSION activities of the KVK in High resolution should be submitted separately in a CD/DVD along with this report. A part from this, soft copy of the activity wise photos may be submitted in JPEG format.
- Prepare Summary tables carefully tallying with the relevant portions of the main report on all aspects.
- Retain the blank column and rows as such and do not merge the cells. Please specify NIL, wherever not applicable or details are not available.
- Check the names of varieties and hybrids and specify in the report.
- Check the units and totals of each data table.
- Extension activity under celebrations for each important day, please insert separate rows and give appropriate data separately. Clubbing of data should be avoided.
- Success stories/case studies should be supported with data tables and graphs. Without photos success stories will not be considered for inclusion in Annual Report of ATARI.

PART I - GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR-KRISHI VIGYAN KENDRA, HIREHALLI, NH-48, TUMAKURU-572 168	0816-2243175/77	-	**kvk.tumakuru2@icar.gov.in iihrkvk@gmail.com**	**www.iihrkvk.org**

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

Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH Hesaraghatta Lake Post, Bengaluru-560 089	080-23086100	080-28466291	**director.iihr@icar.gov.in, iihrdirector@gmail.com**	**www.iihr.res.in**

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. N.Loganandhan	---	8277252099	n.loganandhan@icar.gov.in

1.4. Year of sanction: 24th March 2009

1.5. Staff positionas on 31 December 2020

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M /F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST / OBC/ Others)
1	Head/Senior Scientist	Dr. N.Loganandhan	Pr. Scientist & Head	M	Agril.Extn	Ph.D. Agriculture	Level 14	1,62,300	02.08.2013	Permanent	OBC
2	Scientist/SMS	Shri K.N. Jagadish	SMS Agril.Extn.	M	Agril.Extn.	M.Sc. Agriculture	Level 11	80,900	17.11.2009	Permanent	OBC
3	Scientist/SMS	Shri P.R.Ramesh	SMS Soil Science	M	Soil Science	M.Sc. Agriculture	Level 11	80,900	17.11.2009	Permanent	OBC
4	Scientist/SMS	Shri Prashanth J.M	SMS Horticulture	M	Horticulture	M.Sc. Agri Horticulture	Level 11	80,900	24.11.2009	Permanent	Others
5	Scientist/SMS	Dr. B. HanumantheGowda	SMS Plant Protection	M	Plant Protection	M.Sc. Agriculture	Level 11	80,900	02.12.2009	Permanent	Others
6	Scientist/SMS	Smt. RadhaR.Banakar	SMS Home Science	F	Home Science	M.Sc. Home Science	Level 11	80,900	05.12.2009	Permanent	Others
7	Scientist/SMS	Dr. Somashekar	SMS Plant Breeding	M	Plant Breeding	M.Sc. Agriculture	Level 11	80,900	07.12.2009	Permanent	Others
8	Programme Assistant (Computer)	Shri.N.Jayasankar	Assistant Chief Technical Officer (Comp. –Lab.)	M	Computer Application	MCA	Level 11	74,000	15.06.2017	Permanent	OBC
9	Programme Assistant(Lab Tech.)	Shri Shashidhara K N	Senior Technical Assistant (Lab.)	M	Crop Physiology	M.Sc. Agriculture	Level 6	44,900	17.10.2012	Permanent	SC
10	Programme Assistant/Farm Manager	Shri. Sanna Manjunath	Farm Manager	M	Agronomy	M.Sc. Agriculture	Level 7	52,000	29.06.2020	Permanent	OBC
11	Assistant	Shri. G.S. Ramakrishna	LDC	M	-	Diploma in Horticulture	Level 3	27,900	01.06.2018	Permanent	OBC
12	Jr. Stenographer	Smt.VedaKurnalli	Jr.Stenographer	F	Stenographer	DCP	Level 4	35,400	17.02.2010	Permanent	Others
13	Driver - 1	Sri M.H.Ningappa	Driver	M	Driver	S.S.L.C.	Level 3	32,300	30.12.2009	Permanent	ST
14	Driver - 2	Vacant	-	-	-	-	-	-	-	-	-
15	SS-1	Vacant	-	-	-	-	-	-	-	-	-
16	SS-2	Vacant	-	-	-	-	-	-	-	-	-

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

S. No.	Item	Area (ha)
1	Under Buildings	1.7
2.	Under Demonstration Units	2.95
3.	Under Crops	2.3
4.	Orchard/Agro-forestry	9.85
5.	Others	0

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							
4.	Demonstration Units							
	1 Animal Shed	RFS-KVK	04.01.2018	300	99,800			
	2 Shade net	RFS-KVK	26.12.2017	196	40,000			
	3 AMC Liquid Unit	RFS-KVK	08.10.2017	-	95,000			
5	Fencing							
6	Rain Water harvesting system							
7	Threshing floor							
8	Farm godown							
9	Solar lights	IIHR	03.03.2018	-	6,46,713			
10	Toilet at farm	IIHR	01.01.2018	-	3,96,000			
1.	Administrative Building							
2.	Farmers Hostel							
3.	Staff Quarters							
	1							
	2							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Diesel Jeep	2009	596783	302724	Good
Motor Cycle	2010	52658	53964	Good
Honda – Aviator	2010	46025	40279	Good
Power Tiller	2010	1 42400	47 Hours	Good
Tractor	2011	560000	5047 Hours	Good

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Xerox Machine	2010	67,262	Good Condition
White Board with Stand	2010	1,500	Good Condition
LCD Projector with Accessories	2010	1,00,000	Good Condition
LCD Projector with Accessories	2018	45,000	Good Condition
LED TV	2017	64,000	Good Condition

Public Address System	2017	20,000	Good Condition
R.O.S system	2017	72,000	Good Condition
Solar Hot Water System	2017	72,000	Good Condition

1.8. Details of SAC meeting conducted during 2020

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
11.02.2019	50	Implementation of DFI in Sujalaand NICRA adopted villages is to be ensured	DFI concept based activities have been implemented in one of the NICRA adopted village (Tanganahalli).	
		Demonstration Organic farming technologies at DurgadahalliCluster village need to be taken	Organic farming technologies like application of Jeevamrutha and suitable varieties like Arka Suvitha (French Bean) were introduced.	
		Crop wise constraints in DFI villages need be assessed	Bench mark survey of 50 farmers from each DFI village was collected including crop wise constraints. Interventions (based on assessing these constraints) will be carried out in the coming years.	
		ArkaPrajwal(Tuberose) need to be introduced in Pavagada cluster	A demonstration was taken up in Venkatapura village of Pavagada cluster. Based on the need of farmers, an FLD shall be proposed in 2020.	
		Replacement of TMV-2 with adequate support (Change in sieve in oil mill etc) need to be explored	HYVs of Groundnut from NRC Groundnut, Gujarat (DGMRB-24, DGMRB-32 and TG-37 A) were taken on OFT in 2019. The results could help us in deciding the options of replacement of TMV-2. On discussion with KOF officers, an information about TMV-10 (TNAU) was received. This could be tried on OFT in 2020.	
		Demonstration of K6 Groundnut varieties in Tumakuru Dist. need to be encouraged	Under CFLD, improved varieties of Groundnut (K6) was demonstrated in 20 ha.	
		Increase oil seed area by suggesting alternative crop under DFI	Pusa mustard varieties were introduced in selected areas under OFT in 2019. In collaboration with KOF and IARI, Regional Station, Wellington (Tamil Nadu), further up scaling will be taken up in the coming years.	
		Improved New Maize varieties need to be introduced	New Maize variety (MAH-14-5) was introduced under FLD in 2019. Another new variety (MAH-14-138) from VC Farm, Mandya is to be taken in 2020 under Field Trials at KVK Hirehalli farm and farmers fields.	
		Armyworm control in maize and ragi needs to be given awareness by conducting campaigns in collaboration with Dept. of Agriculture	Awareness programmes, training activities were organized in collaboration with Dept. of Agriculture on 18/09/2019.	
		Decomposing method in arecanut husk need to be explored	An OFT on Decomposing Arecanut husk is under progress.	
		IFS concept can be encouraged in KVK	The IFS concept is already in practice	

			in KVK farm. Every year minimum one additional component is being introduced. Farmers are also encouraged to take up IFS models.	
		Marvel grass fodder variety for demonstration can be tried	FLDs on Marvel grass, Hybrid Napier Bajara, Fodder Sorghum varieties were taken up in 2019.	
		FPO members needs to be invited to KVK for Knowledge sharing	Training programmes for Pavagada FPO were arranged during 15-16, Oct 2019 off campus.	
		Successful technologies of ICAR and IIHR need to be demonstrated at KVK farm	This is a continuous process of demonstration at KVK farm. However, in 2019 technologies (Improved varieties of flowers and medicinal plants) has given below were introduced to KVK farm. Centella - Arka Divya, Arka Prabhavi, Rose - Arka Swandesh, Arka Pride, Arka Savi, Arka Parimala, Tuberose - Arka Prajwal Crossandra- Arka Chenna, Arka Kanaka, Arka Ambar, Arka Shravya, Gladiolus- Arka Amar, Arka Gold, Arka KumKum, Arka Naveen	
		Vegetable seed production activities can be taken up in the identified farmers' fields.	French Bean (Arka Arjun) was introduced in to Badavanahalli village, Pavagada taluk under Vegetable Seed Production.	
		Demonstration of Betelvine of local varieties and also production of planting material can be considered	Planting materials of selected varieties of Betelvine, including local ones, are under production and sale to the needy farmers.	
		More training and awareness in collaboration with Horticulture dept. and also install more no. of bee hives at KVK instruction farm.	DDH was approached for more collaboration work with KVK in terms of training and awareness programmes. No. of beehives were increased from 4 to 15 in this year.	
		Medicinal crops like Lemon grass and Palma Rosa can be taken up in Pavagada villages as the alkaloid content is very rich in these crops are grown in this region.	FLDs on Lemon Grass (Krishna) and Palma Rosa (PRC-1.) were taken in DFI village of Pavagada in 2019. Further, awareness is being created to cover other areas under medicinal crops.	

PART II - DETAILS OF DISTRICT

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

Sl. No	Farming system/enterprise
1	Dry Land Agriculture
2	Dry Land Horticulture
3	Dairy

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

Sl. No	Agro-climatic Zone	Characteristics
1.	Central Dry Zone (Zone IV) Taluks: Koratgere, Madhugiri, Sira, Pavagada	• This zone covers an area of 4.74 Lakhs hectare • The Annual rainfall ranges from 454 and 718 mm, of which more than 55% received in Kharif season. • The elevation ranges from 639 and 1197m • Soils are red sandy loams in major areas, shallow to deep black in remaining areas. • The major crops grown are Ragi, Paddy, Redgram, Groundnut, Sunflower, Coconut, Arecanut, Mango, Banana, Tomato, Brinjal, Beans, Peas, Aster, Dairy
2.	Eastern Dry Zone (Zone V) Taluk: Tumakuru	• This zone covers an area of 1.04 Lakh hectares. • The Annual rainfall ranges from 679 and 889 mm, of which more than 50% received in Kharif season. • The elevation is 818 m from sea level. • Soils are red loamy in major areas, shallow to deep black in remaining areas. • The major crops grown are Groundnut, Maize, Paddy, • Ragi, Redgram, Tomato, Brinjal, Mango, Sapota, Arecanut, Coconut, Aster, Dairy etc.,

Sl. No	Agro ecological situation	Characteristics
1	Agro eco sub region-1	Hot moist, semi-arid ESR with LGP 150-180 days (LGP-length of growing period)

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Red Sandy Loam	• Colour given by hematite's or Yellow limonite's • Poor in soil fertility • Low base exchange capacity • Deficient in organic matter • Low water holding capacity • The pH ranges from 5.5.-6.5 • Low cohesion, plasticity & swelling	6,15,230
2.	Red Loam	• Colour given by oxides of iron • Poor in soil fertility • Low- medium Base Exchange capacity • Deficient in organic matter • Low water holding capacity • The pH ranges from slightly acidic or neutral • Low cohesion, plasticity & swelling	2,04,093
3.	Shallow Black Soil	• Colour varying from dark brown to dark yellowish brown • Soil with more than 35 per cent clay and crack	2,45,432

		when it is dry • High soil fertility • High base exchange capacity • High organic matter content • High water holding capacity • The pH ranges from 7.5 -8.5 • High cohesion, plasticity & swelling	

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

Sl. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Paddy	4,858	37,064	2,993
2	Maize	20,122	56,200	2,323
3	Ragi	1,44,547	2,19,246	1,496
4	Minor Millets	2,929	3,14,003	1,698
5	Rad gram	10,963	3,740	359
6	Horse gram	16,254	8,266	481
7	Field bean (Avare)	6,251	3,456	599
8	Ground nut	55299	31,016	454
9	Coconut	1,45,660	12,53,548 (1000 nuts)	9,000 Nos
10	Areca nut Processed	32,341	2,81,840	9,705

* Source: Tumakuru District at a Glance 2017-18

2.5. Weather data

Month	**Rainfall (mm)**	**Temperature ^{0} C**		**Relative Humidity (%)**
		Maximum	**Minimum**	
January 2020	2	35.5	-	55.78
February 2020	10	39.6	10.3	58.74
March 2020	0	42.0	11.3	56.16
April 2020	24	46.6	16.6	56.77
May 2020	73	42.3	-	56.18
June 2020	84	46.2	4.6	65.88
July 2020	43	36.4	13.1	69.80
August 2020	103	35.3	4.2	72.11
September 2020	169	36.3	-	66.41
October 2020	238	40.0	17.0	71.78
November 2020	26	34.9	11.4	69.60
December 2020	21	34.9	10.0	69.55

* Source: KSNDMC, Bengaluru

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

Category	**Population**	**Production (**tonnes)	**Productivity**
Cattle			
Crossbred	141190	341000 Milk	-
Indigenous	446636		-
Buffalo	241607		-
Sheep			
Crossbred	6565	4646 Meat	-
Indigenous	1061132		-
Goats	517763		-
Pigs			-
Crossbred	144		-
Indigenous	7631		-
Rabbits	121		-

Poultry			
Hens		48800000 No. of eggs	-
Desi			-
Improved	711273		-
Ducks			-
Turkey and others			-

Category	Area	Production	Productivity
Fish	-		
Marine	-		
Inland	-	9251.59 metric ton	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

* Source: www.tumkurzillapanchayat.in

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

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.	Koratagere Tumakuru Pavagada	Kolala Pavagada	Vaddarahalli Pallavalli	2	Tomato	Leaf curl, Late blight, wilting Low yield and Low storability	ICM
2	Madhugiri	Doddere	K P Halli	2	Onion	Non availability of Rabi varieties, Poor storability	New varieties
3	Sira, Koratagere Madhugiri	Bukkapattana Kolala Doddere	Kumabarahalli Tanaganahalli Rangapura	2 3 2	Foxtail millet	Use of Local varieties, Lack of Knowledge on High yielding varieties and lack of knowledge on processing and value addition	New varieties, Value addition
4.	Koratagere	Kolala	Vaddarahalli	2	Musatard	Lack of suitable oilseed crop during Rabi season	New varieties
5.	Pavagada	Arasikere Venkatapura	Kothur Venkatapura	1 2	Tuberose	Small size flowers, less shelf life & low yield	New Variety
6.	Tumakuru Koratagere	Urdigere Kolala	Chikkadoddavadi, Tanaganahalli	3	Arecanut	Mono-cropping, Low soil fertility, *AnabeRoga*, Nut splitting, Low income	Nutrient Management
7	Koratagere Madhugiri Pavagada	Kolala Doddere Pavagada	Tanaganahalli Rangapura Pavagada	2 2 2	French bean	Mosiac disease, Rust, local varieties low yield	ICM
8.	Sira ,Madhugiri Koratagere	Bukkapattana Doddere Kolala	Kumabarahalli Rangapura Tanaganahalli	2 2 2	Nutrition garden	Lack of knowledge on nutrition garden and nutrition insecurity	Food and Nutrition Security
9.	Sira ,Koratagere Madhugiri, Tumakuru	Bukkapattana Kolala Doddere Urdigere	Kumabarahalli Chikkadoddavadi Tanaganahalli Rangapura Kodigenahalli	2	Ragi	Low yield, Less acceptability of value added products from existing varieties due to brown colour	ICM & Value addition

10.	Sira Koratagere Madhugiri Pavagada	Bukkapattana Kolala Doddere Venkatapura	Kumabarahalli D Nagenahalli Rangapura Venkatapura	2 2 2 2	Chilli	Low yield, Local varieties , Imbalanced nutrition, Disease incidence – Mosaic virus susceptible	ICM
11.	Tumakru	Kolala	Chikkdoddawadi Halugondahalli	2	Bhendi	Low yield , severe yellow vein mosaic	IPDM
12.	Sira Pavagada	Bukkapattana Venkatapura	Kumabarahalli venkatapura	2	Pomegranate	Bacterial blight, leaf spot disease, sucking pest problem	ICM
13.	Koratagere Madhugiri Tumakuru	Kolala Doddere	Anupanahalli Rangapura Kodigenahlli	2 2 2	Paddy	Water stress, Neck blast, nutrient deficiency, weeds, Non awareness about aerobic paddy, Rat menace,	ICM
14.	Koratagere Tumakuru Madhugiri	Kolala Urdigere Dodderi	Tanaganahalli Kodigenahlli Shivanagere	2 2	Fodder	Non availability of suitable fodder crop for higher yield	New Varieties
15.	Sira	Dodderi	Rangapura	2	Tamarind	Lack of knowledge on processing and value addition, low income	PHT
16.	Sira, Koratagere Madhugiri	Bukkapattana Kolala Dodderi	Kumabarahalli Tanaganahalli Rangapura	2 3 2	Brown Top Millet	lack of knowledge on processing and value addition	Processing & Value addition

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.	Pavagada	Kasaba	Madavarayanapalya	Ramakrishnappa S/o Obalanarasimhappa	100000	55000	45000
2.	Pavagada	Kasaba	Madavarayanapalya	Nanjappa S/o Muttyalappa	65780	26841	38939
3.	Pavagada	Kasaba	Madavarayanapalya	Narasimhappa S/o Channappa	24000	6000	18000
4.	Pavagada	Kasaba	Madavarayanapalya	Nagarajappa S/o Nagabasappa	15687	26789	-11102
5.	Pavagada	Kasaba	Madavarayanapalya	Yashodamma D/o Ashwathappa	18974	17500	1474
6.	Pavagada	Kasaba	Madavarayanapalya	Krishnappa S/o Nanjappa	25000	27000	-2000
7.	Pavagada	Kasaba	Neralekunte	Srinivasreddy S/0 Hanumanthareddy	200000	160000	40000
8.	Pavagada	Kasaba	Madavarayanapalya	Shankarreddy S/o Bhavareddy	75000	15000	60000
9.	Pavagada	Kasaba	Madavarayanapalya	AnjinappaS.o Late Appannappa	33600	27000	6600
10.	Pavagada	Kasaba	Madavarayanapalya	Chandrappa S/o Narayanappa	23000	6000	17000
11.	Pavagada	Kasaba	Madavarayanapalya	Ramachandrappa S/o Narasimhappa	19500	16700	2800
12.	Pavagada	Kasaba	Madavarayanapalya	RamaswamyS.oAdavappa	23600	21000	2600
13.	Pavagada	Kasaba	Madavarayanapalya	Venkatarama S/o Ramareddy	36000	6000	30000
14.	Pavagada	Kasaba	Madavarayanapalya	EguventiNarayanappa S/o EguventiNanjappa	32000	17800	14200
15.	Pavagada	Kasaba	Madavarayanapalya	SubbayappaS.oNanjappa	36000	10000	26000

16.	Pavagada	Kasaba	Madavarayanapalya	Ashwathappa S/o Narasimhappa	23000	18000	5000
17.	Pavagada	Kasaba	Madavarayanapalya	Anjinappa S/o Narayanappa	26500	19400	7100
18.	Pavagada	Kasaba	Madavarayanapalya	Ganagmma S/o Marappa	12000	1000	11000
19.	Pavagada	Kasaba	Madavarayanapalya	Hanumatharayapppa S/o Adivappa	24000	5000	19000
20.	Pavagada	Kasaba	Neralekunte	Thimmaraju S/o Subappa	72000	58900	13100
21.	Pavagada	Kasaba	Madavarayanapalya	Govindareddy S/o Hanumanthareddy	240000	20000	220000
22.	Pavagada	Kasaba	Madavarayanapalya	Narasimhappa S/o Madappa	14400	1800	12600
23.	Pavagada	Kasaba	Madavarayanapalya	Anjinappa S/o Nanjappa	16480	15300	1180
24.	Pavagada	Kasaba	Madavarayanapalya	Mangamma S/o Narasimhappa	45894	37964	7930
25.	Pavagada	Kasaba	Madavarayanapalya	Narsimha S/o Narasimhappa	18560	15700	2860
26.	Pavagada	Kasaba	Madavarayanapalya	Adinarayana S/o Chennappa	14400	3000	11400

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	Madhugiri	Dodderi	Rangapura	Ravi kumar	68000	32500	35500
2	Madhugiri	Dodderi	Rangapura	Ramachandrappa	48000	21600	26400
3	Madhugiri	Dodderi	Rangapura	Hanumatarayappa	83500	45600	37900
4	Madhugiri	Dodderi	Badavanahalli	Ramesh	38400	25300	13100
5	Madhugiri	Dodderi	Rangapura	Shankrappa	58500	32400	26100
6	Madhugiri	Dodderi	Rangapura	Ragavendra	98500	66600	31900
7	Madhugiri	Dodderi	Rangapura	Laxmiranganatha	175000	109200	65800
8	Madhugiri	Dodderi	Rangapura	Timmegowda	37450	21380	16070
9	Madhugiri	Dodderi	Rangapura	Shivanna	67550	38740	28810
10	Madhugiri	Dodderi	Rangapura	Chowdappa	59780	33740	26040
11	Madhugiri	Dodderi	Rangapura	Ramanna	88250	42750	45500
12	Madhugiri	Dodderi	Rangapura	RC Chowdegowda	92780	60780	32000
13	Madhugiri	Dodderi	Rangapura	Banvegowda	235400	128800	106600
14	Madhugiri	Dodderi	Rangapura	Ravikumar	37480	22412	15068
15	Madhugiri	Dodderi	Rangapura	Hanumakka	87620	46550	41070
16	Madhugiri	Dodderi	Rangapura	Srinivasa	36740	18750	17990
17	Madhugiri	Dodderi	Rangapura	Shivakumar B	26780	15880	10900
18	Madhugiri	Dodderi	Rangapura	Ramesh D	79500	48750	30750
19	Madhugiri	Dodderi	Rangapura	Manjunath N	65300	40900	24400
20	Madhugiri	Dodderi	Rangapura	Jayaramaiah	177800	114500	63300
21	Madhugiri	Dodderi	Rangapura	Ranganatha	145800	98070	47730
22	Madhugiri	Dodderi	Rangapura	Nagaraju	147700	98700	49000
23	Madhugiri	Dodderi	Rangapura	Laxmamma D	151800	126000	25800
24	Madhugiri	Dodderi	Rangapura	Lokesh	85740	45780	39960
25	Madhugiri	Dodderi	Rangapura	Obalanarashimaiah	88740	47850	40890
26	Madhugiri	Dodderi	Rangapura	Doddanna	145250	98740	46510
27	Madhugiri	Dodderi	Rangapura	Siddappa	84650	52740	31910
28	Madhugiri	Dodderi	Rangapura	Shivaramaiah	112740	76250	36490
29	Madhugiri	Dodderi	Rangapura	Chikkaranganayaka	78650	47230	31420
30	Madhugiri	Dodderi	Rangapura	Kempasiddappa	72400	42700	29700
31	Madhugiri	Dodderi	Rangapura	B R Devaraju	75000	45780	29220
32	Madhugiri	Dodderi	Rangapura	K K Suresh	68500	38450	30050

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	Koratagere	Koratagere	Tanganahalli	Subramanya	456,700	342,500	114,200
2	Koratagere	Koratagere	Tanganahalli	Narasaraju.R	398600	280500	118100
3	Koratagere	Koratagere	Tanganahalli	Puttaraju	140300	84500	55800
4	Koratagere	Koratagere	Tanganahalli	Seenappa	171500	97000	74500
5	Koratagere	Koratagere	Tanganahalli	Shivalingaiah	613000	434000	179000
6	Koratagere	Koratagere	Tanganahalli	Sudhakar	109600	84500	25100
7	Koratagere	Koratagere	Tanganahalli	Jayanna	72800	48000	24800
8	Koratagere	Koratagere	Tanganahalli	Shivakumar.S	60000	45200	14800
9	Koratagere	Koratagere	Tanganahalli	Nagaraju.S	45000	35000	10000
10	Koratagere	Koratagere	Tanganahalli	Anjanamrthy	25,600	24,500	1100
11	Koratagere	Koratagere	Tanganahalli	Gangadharaiah	72000	40000	32000
12	Koratagere	Koratagere	Tanganahalli	Umesh	247200	175700	71500
13	Koratagere	Koratagere	Tanganahalli	Shivakumar.H	75500	56000	19500
14	Koratagere	Koratagere	Tanganahalli	Dasanna	115000	88500	26500
15	Koratagere	Koratagere	Tanganahalli	Ramanna	21800	20000	1800
16	Koratagere	Koratagere	Tanganahalli	Ramachandrappa	46300	33000	13300
17	Koratagere	Koratagere	Tanganahalli	Narasaiah	94000	77500	16500
18	Koratagere	Koratagere	Tanganahalli	Lakshmanappa	584000	386000	19800
19	Koratagere	Koratagere	Tanganahalli	Kadarappa	58500	45500	13000
20	Koratagere	Koratagere	Tanganahalli	Eramma	45,300	28,100	17,200
21	Koratagere	Koratagere	Tanganahalli	Mukundachar	25,800	21,700	4,100
22	Koratagere	Koratagere	Tanganahalli	Narasaiah.S	43,900	27,200	16,700
23	Koratagere	Koratagere	Tanganahalli	Shrirangappa	112,400	59,600	52,800
24	Koratagere	Koratagere	Tanganahalli	Narayanappa.T.R	56,100	38,500	17,600
25	Koratagere	Koratagere	Tanganahalli	Shrinivasmurthy	52,300	36,800	15,500
26	Koratagere	Koratagere	Tanganahalli	Rangappa	109,700	65,400	44,300
27	Koratagere	Koratagere	Tanganahalli	Chennarayappa	80,600	49,300	31,300
28	Koratagere	Koratagere	Tanganahalli	Narayanappa.T.S	47,500	31,200	16,300
29	Koratagere	Koratagere	Tanganahalli	Nagaraju.V	24,300	24,300	0
30	Koratagere	Koratagere	Tanganahalli	Nagaraju.H	23,500	23,000	500
31	Koratagere	Koratagere	Tanganahalli	Ramesh. N	22,500	2100	500
32	Koratagere	Koratagere	Tanganahalli	Rajashekhar.K	118,900	79,400	39,500
33	Koratagere	Koratagere	Tanganahalli	Ramahanumaiah.H	29,100	20,200	8,900
34	Koratagere	Koratagere	Tanganahalli	Narasimharaju.D	48,650	32,900	15,750
35	Koratagere	Koratagere	Tanganahalli	Jagadish.N	23,700	22,400	1300
36	Koratagere	Koratagere	Tanganahalli	Timmaiah.C	45,600	33,100	12,500
37	Koratagere	Koratagere	Tanganahalli	Lakshmirangaiah	80,300	58,200	22,100
38	Koratagere	Koratagere	Tanganahalli	Venkataramiah	54,200	31,400	22,800
39	Koratagere	Koratagere	Tanganahalli	Timmarangiah.C	72,800	49,100	23,700
40	Koratagere	Koratagere	Tanganahalli	Rangasamiah.C	85,700	58,500	27,200
41	Koratagere	Koratagere	Tanganahalli	Ramasamaiah	69,300	53,400	15,900
42	Koratagere	Koratagere	Tanganahalli	Chandranna	48,100	31,200	16,900
43	Koratagere	Koratagere	Tanganahalli	Ranganath	35,300	22,100	13,200

44	Koratagere	Koratagere	Tanganahalli	Krishnappa.M	89,500	65,900	23,600
45	Koratagere	Koratagere	Tanganahalli	Ramashankaraiah	20,600	18,700	1,900
46	Koratagere	Koratagere	Tanganahalli	Jayaramachar	83,500	57,600	25,900
47	Koratagere	Koratagere	Tanganahalli	Siddaraju	34,200	26,100	8,100
48	Koratagere	Koratagere	Tanganahalli	Basavaraju	57,700	32,800	24,900
49	Koratagere	Koratagere	Tanganahalli	Timmaranagaiah.R	47,300	29,200	18,100
50	Koratagere	Koratagere	Tanganahalli	Mutturayappa	29,000	22,000	7,000

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	Sira	Bukkapattana	Kumbarahalli	Gangadhara	87,300	54,700	32,600
2	Sira	Bukkapattana	Kumbarahalli	Rajanna	84,000	58,000	26,000
3	Sira	Bukkapattana	Kumbarahalli	Laksmikanthayya	81000	55,000	26,000
4	Sira	Bukkapattana	Kumbarahalli	Julamarappa	70,000	48,000	22,000
5	Sira	Bukkapattana	Kumbarahalli	Ningaraju	55,000	34,000	21,000
6	Sira	Bukkapattana	Kumbarahalli	Puttaraju	74,000	48,600	25,400
7	Sira	Bukkapattana	Kumbarahalli	Nagaraju	63,000	28,000	35,000
8	Sira	Bukkapattana	Kumbarahalli	Patayya	58,000	32,500	25,500
9	Sira	Bukkapattana	Kumbarahalli	Nagaraju,K.P	45,000	36,000	11,000
10	Sira	Bukkapattana	Kumbarahalli	Chikkanna	48,000	35,500	12,500
11	Sira	Bukkapattana	Kumbarahalli	Siddaraju	60,000	43,000	17,000
12	Sira	Bukkapattana	Kumbarahalli	Yogananda	78,000	49,600	28,400
13	Sira	Bukkapattana	Kumbarahalli	Ranganathappa	33,000	18,500	14,500
14	Sira	Bukkapattana	Kumbarahalli	Naranappa	76,400	49,700	26,700
15	Sira	Bukkapattana	Kumbarahalli	Patalingayya	92,000	51,200	40,800
16	Sira	Bukkapattana	Kumbarahalli	Lakshmiranganath	59,000	27,000	32,000
17	Sira	Bukkapattana	Kumbarahalli	Kumar	75,000	38,600	36400
18	Sira	Bukkapattana	Kumbarahalli	Govindappa	48,000	29,000	19,000
19	Sira	Bukkapattana	Kumbarahalli	Chikkayya	45,000	35,000	10,000
20	Sira	Bukkapattana	Kumbarahalli	Shantharaju	49,000	33,000	16,000
21	Sira	Bukkapattana	Kumbarahalli	Kumara K	35,000	24,000	11,000
22	Sira	Bukkapattana	Kumbarahalli	Chikkapatayya	42,000	28,000	14,000
23	Sira	Bukkapattana	Kumbarahalli	Bhupalayya	64,000	39,500	24,500
24	Sira	Bukkapattana	Kumbarahalli	Marappa.K.P	75,000	47,500	27,500
25	Sira	Bukkapattana	Kumbarahalli	Chikkanarashivvayya	81,000	63,500	17,500
26	Sira	Bukkapattana	Kumbarahalli	Hattimarappa	72,000	48,000	22,000
27	Sira	Bukkapattana	Kumbarahalli	Kariyappa	53,000	38,000	15,000
28	Sira	Bukkapattana	Kumbarahalli	Devaraju	124,000	83,400	40,600
29	Sira	Bukkapattana	Kumbarahalli	Hanumayya	35,000	21,000	14,000
30	Sira	Bukkapattana	Kumbarahalli	Vasudeva	90,000	61,000	29,000

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.	Tumakuru	Tumakuru	Kodigehalli	K.C.Laxman S/o K.R.Chikkarangaiah	1,10,000	55,000	55,000
2.	Tumakuru	Tumakuru	Kodigehalli	Thimmaiah S/o Late Chikkathimmaiah	60,000	32,500	27,500
3.	Tumakuru	Tumakuru	Kodigehalli	Srinivasaiah K s/o Late Kariyappa	75,000	15,000	60,000
4.	Tumakuru	Tumakuru	Kodigehalli	Veerabhadraiah S/o Late Rudraiah	33,600	27,000	6,600
5.	Tumakuru	Tumakuru	Kodigehalli	Narayanappa S/o Late Govindaiah	23,000	6,000	17,000
6.	Tumakuru	Tumakuru	Kodigehalli	Krishnappa G. S/o Late Govindaiah	19,500	16,700	2,800
7.	Tumakuru	Tumakuru	Kodigehalli	Krishnamurthy S/0 Chikkathimaiah	23,600	21,000	2,600
8.	Tumakuru	Tumakuru	Kodigehalli	K. Narayan S/o Late Chikkarangaiah	75,000	15,000	60,000
9.	Tumakuru	Tumakuru	Kodigehalli	Kemparaju KR S/o Rangaswamy KC	33,600	27,000	6,600
10.	Tumakuru	Tumakuru	Kodigehalli	Rajashekaraiah S/o Venkataswamaiah	23,000	6,000	17,000
11.	Tumakuru	Tumakuru	Kodigehalli	Ganganna S/o K T Thimmaiah	23,000	18,000	5,000
12.	Tumakuru	Tumakuru	Kodigehalli	Jagadish KS	26,500	19,400	7,100
13.	Tumakuru	Tumakuru	Kodigehalli	Rangaiah S/o Late Rangaiah	12,000	1,000	11,000
14.	Tumakuru	Tumakuru	Kodigehalli	Puttaswamaiah S/o Venkataswamaiah	24,000	5,000	19,000
15.	Tumakuru	Tumakuru	Kodigehalli	Rangaswamaiah S/o Siddaiah	20,600	18,700	1,900
16.	Tumakuru	Tumakuru	Kodigehalli	Bhanuprakash K S S/o Late Shivanarangaiah	83,500	57,600	25,900
17.	Tumakuru	Tumakuru	Kodigehalli	Rangaswamaiah S/o Late Rangaiah	34,200	26,100	8,100
18.	Tumakuru	Tumakuru	Kodigehalli	Harish K R S/o Rangaiah	57,700	32,800	24,900
19.	Tumakuru	Tumakuru	Kodigehalli	Krishnappa D	47,300	29,200	18,100
20.	Tumakuru	Tumakuru	Kodigehalli	Rajashekaraiah	20,600	18,700	1,900

2.10 Priority thrust areas

S. No	Thrust area
1.	High Yielding varieties / Hybrids
2.	Seed treatment with Bio fertilizers and fungicides
3.	Soil test based fertilizer application
4.	Integrated Cropping Management
5.	Integrated Nutrient Management
6.	Integrated Pest & Disease Management
7.	Intercropping / Mixed / Multistoried cropping system
8.	Seed Production Techniques in Vegetables and field crops
9.	Post harvest technology in Vegetables and Fruits
10.	Soil and Water Conservation
11.	Drudgery Reduction among women
12.	Income Generating Activities and Value Addition
13.	Child and Women Care and balanced nutrition

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
4	4	15	15	14	14	108	108

Training				Extension Programmes			
3				4			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
30	35	1000	1009	292	2670	9600	6922

Seed Production (Q)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
8.00	8.52	0.28 lakhs	0.52 lakhs
Mushroom Spawn - 5.0	13.68		

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
		AMC powder -2000	3199
		AMC Liquid(Litre)-2000	4200
Others		Neem Soap- 3000	3729
Amla Candy - 100 Kg.	62 Kg.	Pongamia Soap-1000	1408
Amla Squash - 500 Ltrs.	306 Ltrs.	Pheromone traps and lures Nos. - 5000	10586
Ragi Malt - 100 Kg.	62 Kg.	Arka Borer Controller- 1000	418
Micronutrient - 140 q	237.62 q		

3.B1. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
													No.	Kg
01		Tomato	Leaf curl, Late blight, wilting Low yield and Low storability		Integrated crop Management in Tomato Arka Abedh IPDM Measures	0	0	0	0	0.005	-	-	03	95
02	Organic farming	Composting	Delay and ineffective decomposing process in traditional methods	Assessment of decomposing cultures in compost preparation	-	-	-	-	02	-	-	-	50 ml	2 kgs
03	Variety Evaluation	Mustard	Lack of suitable oilseed crop during Rabi season, high pungency	Assessment of Mustard varieties as oil seed crops	-	0	0	0	05	0.08	0	0	0	0
04	Varietal evaluation	Groundnut	Severe drought situation	Assessment of Drought tolerant varieties in Groundnut		0	0	0	02	3.6	--	--	01	250
05	Variety Evaluation	Onion	Non availability of Rabi variety, Poor storability and low yield	Assessment of onion varieties for rabi	-	0	0	0	06	0.09	0	0	0	0
06.	Organic Farming	French Bean	Poor soil health and low soil fertility	-	Demonstration of organic farming practices in French bean	3	0	0	05	0.5	0	0	1	10 lits
07	ICM	Chilli	Low yield, Local varieties , Imbalanced nutrition, Disease incidence – Mosaic virus susceptible	-	ICM in Chilli	1	0	0	08	0.0015	0	0	1	5 litrs
08	ICM	French Bean	Low yield, Use of local varieties, Non use of disease resistance varieties, Improper Nutrient Management	-	ICM in French Bean	1	1	0	06	0.40	0	0	0	30 kg
09	HYV	Tuberose	Small size flowers, Less shelf life (days) Low yield	-	Demonstration of Tube rose variety ArkaPrajwal	0	0	0	05	3.0	0	0	1	300 kg
10	ICM	Arecanut	Mono-cropping, low nutrient status and low yield, button shedding, mites, stem bleeding, *Ganoderma* wilt, Pests	-	ICM in Arecanut	1	1	0	06	0.5	0	0	0	250 kg

11	Fodder	Fodder	Non availability of improved fodder varieties		CoFS 29	0	0	0	01	0.005	0	0	0	0
12	Organic farming	Pomegranate	Low nutrient use efficiency & soil fertility, Severe incidence of blight and wilt and lower yield		Demonstration of AMC Liquid and ArkaActino plus on Growth, Quality and Yield of Pomegranate	01	0	0	06	0	0	0	35 lit 8 Nos Pherom one traps	40 kg
13	Yield Enhancement	Ragi	Erratic rainfall and delayed monsoon, low yield, low income	-	Enhancement of Productivity of Finger millet by drought tolerant variety ML 365 Seeds -12.5kg /ha. FYM 10 t/ha. Zinc Sulphate – 12.5 kg /ha. Borax 10kg / ha.	01	0	0	04	0.5	0	0	0	10 kg
14	Yield Enhancement	Paddy	Water scarcity, Reduced the paddy area, Low income, High cost	-	Demonstration of water saving Aerobic Paddy Paustic-9 Seeds -7.5kg /ha. FYM 10 t/ha. Green manure - 5t/ha. RDF 100:50:50 kg NPK / ha.	01	0	0	04	0.3	0	0	0	5 kg
15	Value addition	Ragi	Less acceptability of value added products from existing varieties due to brown colour	-	Demonstration of Finger millet Variety KMR 340 for Value Addition	01	0	0	05	0.005	0	0	0	0
16	Value addition	Foxtail	Reduction in area under minor millets due to lack of knowledge on nutritional value and non availability of processing units	-	Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition Seeds 10kg/ha. FYM 6.25 t/ha. RDF 40:40:0 NPK kg/ha.	01	0	0	05	0.005	0	0	0	0
17	Value addition	Brown top millet	Reduction in area under minor millets due to lack of knowledge on nutritional value and non availability of processing units	-	Demonstration of brown top millet for Value Addition Seeds 10kg/ha. FYM 6.25 t/ha. RDF 40:40:0 NPK kg/ha.	01	0	0	05	0.005	0	0	0	0
18	ICM	Redgram	Fusarium wilt, low yielding varieties	-	BRG-5 Seeds 12.5kg/ha. FYM 7.5 t/ha. RDF 25:50:25 NPK kg/ha. Sulpher 20 kg/ha. Zinc Sulphate 12.5kg/ha	01	0	0	06	0.5	0	0	0	0

19	Fodder	Marvel grass	Non availability of suitable fodder crop for higher yield	-	Demonstration of Marvel Grass Perennial Fodder Dicanthiumannulatum	01	0	0	03	-	200 Nos	0	0	0
20	Fodder	Hybrid Napier	Non availability of suitable fodder crop for higher yield	-	Demonstration of Fodder Hybrid Napier	01	0	0	02	-	200 Nos	0	0	0

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No.of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	ICM in Tomato	IIHR, Bengaluru	Tomato	-	1	0	0
2	Demonstration of Tuberose variety ArkaPrajwal	IIHR, Bengaluru	Tuberose	-	1	0	0
3	Assessment of Different Compost cultures in composting of Areca husk	IIHR, Bengaluru UAS, Dharwad NCOF, Gaziabad	Decomposer	1	0	0	0
4	Assessment of Mustard varieties as alternative oilseed crops	IARI, New Delhi	Mustard	1	0	0	0
5	Assessment of Drought tolerant varieties in Groundnut	DOGR,Junagarh	Groundnut	1	0	0	0
6	Assessment of Onion varieties for Rabi	DOG, Pune IIHR Bengaluru NHRDF Nasik	Onion	1	0	0	0
7	Assessment of Onion varieties for Rabi	DOG, Pune IIHR Bengaluru NHRDF Nasik	Onion	1	0	0	0
8	Demonstration of Chilli Variety ArkaHarita	IIHR Bengaluru	Chilli	-	08	01	01 Field day
9	Demonstration of in French Bean variety ArkaArjun	IIHR Bengaluru	French bean	-	05	01	0
10	Integrated Crop Management in Arecanut	CPCRI Kasargod	Arecanut	-	05	01	0
11	Demonstration of Finger millet Variety KMR 340 for Value Addition	UAS, Bengaluru	Ragi KMR-340	-	10	01	0
12	Demonstration of Fodder sorghum CoFS 29	TNAVUS, Namakkal	CoFS 29	-	05	0	0
13	Demonstration of AMC liquid and ArkaActino Plus on growth, quality and yield of Pomegranate	IIHR Bengaluru	Pomegranate	-	05	01	01
14	Enhancement of Productivity of Finger millet by drought tolerant variety ML 365	UAS, Bengaluru	ML 365	-	10	01	02
15	Demonstration of water saving Aerobic Paddy Paustic-9 5	UAS, Bengaluru	Poustic 9	-	05	01	0
16	Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition	UAS Dharwad	DHFT-109 -3 Foxtail millet	-	10	0	0
17	Demonstration of Brown Top Millet for Value Addition	ITK	Brown top millet	-	10	1	0
18	Demonstration of Redgram variety BRG-5	UAS, Bengaluru	BRG-5 Redgram	-	05	01	0
19	Demonstration of Marvel Grass -Perennial Fodder Dicanthiumannulatum	NIANP, Bengaluru	Marvel grass	-	05	0	0
20	Demonstration of Fodder - Hybrid Napier	NIANP, Bengaluru	Hybrid Napier	-	05	0	0

3.B2 contd.

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
				2	0	1	0	0	0	0	00	0	0	00	0
4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0	0	0	0	4	0	1	0	15	0	06	0	22	08	2	0
0	0	0	0	3	0	2	0	12	2	4	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	3	0	2	0	12	0	3	0	0	0	0	0
0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	7	0	3	0	0	17	0	03	0	0	0	0
0	0	0	0	4	0	1	0	22	0	8	0	219	60	15	6
0	0	0	0	7	0	3	0	15	0	03	0	36	6	2	0
0	0	0	0	4	0	1	0	13	0	02	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	4	0	1	0	13	0	4	0	0	0	0	0
0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0

PART IV - On Farm Trial(2020)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation		2			1					3
Integrated Pest Management										
Integrated Crop Management										
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology								1		1
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Cropping Systems										
Farm Mechanization										
Mushroom cultivation										
others										
Total		**2**			**1**			**1**		**4**

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

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

Mechanization										
Mushroom cultivation										
Others										
Total										

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

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 - NIL

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					
Varietal Evaluation	Onion	Assessment of onion varieties for Rabi	3	3	0.6
	Mustard	Assessment of Mustard Varieties as Oilseeds crop	3	3	0.6
	Groundnut	Evaluation of drought tolerant varieties of Groundnut	3	3	3.6
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					

Weed Management					
Resource Conservation Technology	Areca Husk	Assessment of decomposing cultures in compost preparation	03	03	NA
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			15	15	8.4

4.B.2. Technologies Refined under various Crops - NIL

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 assessedunder Livestock - NIL

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 - NIL

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. T**echnologies 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.T**echnologies assessed under various enterprises for women empowerment**

	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	Net Return Rs. / unit	BC Ratio	REMARKS
1	2	3	4	5	6	7	8	9	10	11	12	13
Mustard	Irrigated	Lack of suitable oilseed crop during Rabi season, high pungency	Assessment of Mustard Varieties as Oilseeds crop	03	TO1: PUSA 28	IARI, New Delhi	9.70	Qtls /ha	Per cent oil content 38.17	77,600	3.15	High yield & Less pungency
					TO2: PUSA 30	IARI, New Delhi	11.50	Qtls /ha	Per cent oil content 38.84	92,000	3.73	Less pungency
					TO3: PUSA 31	IARI, New Delhi	12.80	Qtls /ha	Per cent oil content 38.77	1,02,400	4.15	Less pungency

4. C1. 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**
Pusa 28, Pusa 30 and Pusa 31	PUSA-28 is a short duration variety (115 days) suitable for erratic rainfall. Pusa 31 long duration variety and recorded higher yield with Less pungency. For high yield and less pungency, Pusa 31 variety is suitable. For erratic and low rainfall Pusa 28 is suitable.	Nil

4.C1. Details of Successfully completed / concluded technology assessment (support with necessary summary of data and photographs)

1. Title of Technology Assessed:Assessment of Mustard Varieties as Oilseeds crop
2. Performance of the Technology on specific indicators: Pusa 31 and Pusa 28 was found more profitable for Rabi season as compared to Check
3. Specific Feedback from farmers: Pusa 31 and Pusa 28 were found to be more profitable for Rabi season as compared to Ground nut. PUSA-28 is a short duration variety (115 days) suitable for erratic rainfall
4. Specific Feedback from Extension personnel and other stakeholders: Nil
5. Feedback to Research System based on results and feedback received: For high yield and less pungency, Pusa 31 variety is suitable. For erratic and low rainfall Pusa 28 is suitable

4.C2.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
Onion	Irrigated	Non availability of Rabi variety, Poor storability Low yield	Assessment of Onion varieties for Rabi	03	TO1:Arka Niketan	IIHR, Bengaluru	226.26	Qtls/ ha	Purple blotch disease incidence (%) 12.36	1,12,645	2.73	Less Purple blotch incidence
					TO2: Bhima Shakti	DOG, Pune	213.11	Qtls/ ha	Purple blotch disease incidence (%)17.45	1,03,703	2.51	High Purple blotch incidence
					TO3: NHRDF 3 red	NHRDF Nasik	231.33	Qtls/ ha	Purple blotch disease incidence (%) 15.83	1,17,897	2.99	High yield

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
ArkaNikentan, Bhima Shakti and L-3 red	NHRDF Red 3 recorded highest yield and income per unit area compare to Bhimashakti during Rabi Season, with higher bulb weight.	NIl

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

1.Title of Technology Assessed:Assessment of Onion varieties for Rabi
2. Performance of the Technology on specific indicators: NHRDF Red 3 recorded highest yield and income per unit area compare to Bhimashakti during Rabi Season, with higher bulb weight
3. Specific Feedback from farmers: NHRDF 3 red and ArkaNiketan were found to be more profitable for Rabi season as compared to Bhima Shakti. Purple blotch incidence is less in ArkaNiketan.
4. Specific Feedback from Extension personnel and other stakeholders:The assessed varieties can be taken in rabi /summer in irrigated condition. Late sowing may affect the crop with purple blotch and low size bulbs.
5. Feedback to Research System based on results and feedback received: In Rabi season NHRDF 3 Red is performing better and storage life is also high. High yielding hybrids and resistant to purple blotch and twisting

4.C3.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	B:C Ratio (Gross income/ Gross Cost)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	
Groundnut	Rainfed	Non availability of drought tolerant cultivars for the present rainfall erratic situation	Evaluation of drought tolerant varieties of Groundnut	03	K-6 variety	ANGARU, Hyderabad	9.95	Qtls / ha	Plant ht. (29.66) 100 Pod weight in gms(76.66gms)	52486	27926	2.14	
					DGRMB-24	DGR, Junagarh	13.46	Qtls / ha	Plant ht. (22.40) 100 Pod weight in gms(91.66gms)	71002	45402	2.77	DGRMB-24 is found to be very promising in drought situation up to 45 days.
					DGRMB-32	DGR, Junagarh	13.11	Qtls / ha	Plant ht. (18.90) 100 Pod weight in gms(88.78gms)	68628	43028	2.68	-
					TG37A	DGR, Junagarh	13.06		Plant ht. (24.66) 100 Pod weight in gms(73.64gms)	68892	43292	2.69	-

4. C3. 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**
Evaluation of drought tolerant varieties of Groundnut	Highly suitable for erratic rainfall. Medium duration and bold seeded	**NIL**

4.C3.Results of Technologies Assessed

1.Title of Technology Assessed:Assessment of Onion varieties for Rabi

2. Performance of the Technology on specific indicators: NHRDF Red 3 recorded highest yield and income per unit area compare to Bhimashakti during Rabi Season, with higher bulb weight

3. Specific Feedback from farmers: NHRDF 3 red and ArkaNiketan were found to be more profitable for Rabi season as compared to Bhima Shakti. Purple blotch incidence is less in ArkaNiketan.

4. Specific Feedback from Extension personnel and other stakeholders : Nil

5. Feedback to Research System based on results and feedback received: In Rabi season NHRDF 3 Red is performing better and storage life is also high.

6. Feedback on usefulness and constraints of technology

4.C4.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)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	
Arecanut	Rainfed		Assessment of different compost cultures in composting of Arecahusk	03	IIHR decomposer	IIHR	-	-	After 100 days N (%)-0.92 C (%)-23.93 H(%)- 3.61 S(%)-0.13 C:N ratio-26.0 C:H Ratio – 6.63	-	-	-	
					UAS Dharwad	UASD	-	-	After 100 days N (%)-0.97 C (%)-25.18 H(%)- 3.80 S(%)-0.18 C:N ratio-25.95 C:H Ratio – 6.62	-	-	-	
					Siddi Bio Waste decomposer	NCOF	-	-	After 100 days N (%)-0.73 C (%)-1.56 H(%)- 3.38 S(%)-0.31 C:N ratio-29.36 C:H Ratio – 6.36	-	-	-	

4. C4. 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 cultures in composting of Arecahusk	IIHR decomposer found to be having good decomposing capacity than UASD and NCOF.	Nil

4.C4.Results of Technologies Assessed

1. Title of Technology Assessed: Assessment of different compost cultures in composting of Arecahusk
2. Performance of the Technology on specific indicators: IIHR decomposer is very effective than others.
3. Specific Feedback from farmers :Huge quantity cannot be done in Areca husk
4. Specific Feedback from Extension personnel and other stakeholders: Nil
5. Feedback to Research System based on results and feedback received: Nil

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
					T.O.1 (Farmers practice)							
					T.O.2							
					T.O.3							

4. D2. Feedback on technologies refined - NIL

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: - NIL

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

OFT - Assessment of Mustard varieties as alternative oil seed crop

OFT - Assessment of Onion varieties for Rabi

OFT - Assessment of Drought tolerant varieties in Groundnut

OFT - Assessment of Different Compost cultures in composting of Arecahusk

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													
	Cereals													
		Irrigated	Kharif	Paddy	-	Poustic 9	ICM	Demonstration of water saving Aerobic Paddy Paustic-9	2	2	2	8	9	1
	Millets													
		Rainfed	Late kharif	Ragi	KMR-630	-	High yielding	Enhancement of productivity of Finger millet by drought tolerant variety KMR-630	4	4	2	8	8	2
	Vegetables													
		Irrigated	Summer	Bhendi		Arka nikitha	IPDM	• ArkaNikitha - F1 hybrid , AMC : Drenching @ 10ml /lit • Vegetable Special- 2gm /lit at starts at flower initiation stage and regular 15 days interval	2	2	0	0	5	0
		Irrigated	Rabi	French Bean	Arka Arjun	-	ICM	Arka Arjun AMC: 20g /lit Vegetable Special- 2gm /lit & Neem soap : @ 7 g/lit	1	1	2	3	5	0
		Irrigated	Rabi	Chilli		Arka Harita	ICM	ArkaHarita -F1 hybrid- AMC 20g/lit Vegetable Special- 3gm /lit, Yellow sticky traps Neem Soap @7 gm /lit	1	1	1	4	5	0
		Irrigated	Rabi	Tomato		Arka Abhed	ICM	Arka Abedh AMC 20g/lit Vegetable Special- 3gm /lit, Yellow sticky traps Neem Soap @7 gm /lit	2	2	0	0	0	0
	Flowers													
		Irrigated	Rabi	Tuberose	Arka Prajwal		Demo.	Demonstration of Tuberose variety ArkaPrajwal	0.4	0.4	1	2	2	1
	Ornamental													
	Fruit													
		Irrigated	Kharif	Pomegranate	Bhagva	-	Organic farming	Demonstration of AMC liquid and ArkaActino Plus on growth, quality and yield of Pomegranate	2	2	0	3	0	3
	Spices and condiments													

	Commercial													
	Medicinal and aromatic													
	Fodder													
		Irrigated	Rabi	Fodder Sorghum	CoFS 29	-	Fodder	Fodder Seeds CoFS 29 and AMC	0.4	0.4	1	4	5	0
		Irrigated	Rabi	Fodder Grass	Marvel grass	-	Fodder	Fodder Stem Cuttings	0.4	0.4	2	3	4	1
		Irrigated	Rabi	Fodder Sorghum	Hybrid Napier	-	Fodder	Fodder Stem Cuttings	0.4	0.4	2	3	4	1
	Plantation													
		Irrigated	*Kharif*	Arecanut	Local	-	ICM	Neem cake-2kg per tree, French bean seeds-10kg/ acre, COC- 10g per lit water, Hexoconazole -3 ml per 125ml water	2	2	0	5	5	0
	Fibre													
	Dairy													
	Poultry													
	Rabbitry													
	Piggery													
	Sheep and goat													
	Duckery													
	Common carps													
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Others (Specify)													
	Value addition	Rainfed	Late kharif	Ragi	KMR-340	-	Value addit	Demonstration of Finger millet Variety KMR 340	2	2	3	7	8	2

							ion	for Value Addition						
	Value addition	Rainfed	Late kharif	Foxtail	DHFT109-3	-	Value addition	Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition	2	2	5	5	7	3
	Value addition	Rainfed	Late kharif	Brown top millet	Local	-	Value addition	Demonstration of Brown top millet for Value Addition and Market Linkage	2	2	5	5	7	3
	Enterprise													
	EDP-Tamarind	Rain fed		Tamarind	Local	-	EDP	Tamarind processing, Value Addition and Market Linkage	1	1	0	0	0	0
	Nutrition Security	Rain fed		Vegetable and Fruits	IIHR Varieties	-	Nutrition Security	Demonstration on Nutria Gardens	30	30	0	0	0	0

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												
	Cereals												
		Irrigated	Kharif2020	Paddy	Poustic 9		ICM	Demonstration of water saving Aerobic Paddy Paustic-9	Kharif2020	L	M	M	Groundnut
	Millets												
		Rain fed	Late Kharif2020	Ragi	KMR 630	-	High yielding	Enhancement of productivity of Finger millet by drought tolerant variety KMR-630	Late Kharif2020	L	L	M	Ragi
		Rain fed	Late kharif 2019	Foxtail	DHFT 109-3	-	Value addition	Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition	Late kharif 2020	L	M	L	Foxtail
		Rain fed	Late kharif 2020	Ragi	KMR-340	-	Value addition	Demonstration of Finger millet Variety KMR 340 for Value Addition	Late kharif 2020	M	M	L	Ragi
		Rain fed	Late kharif 2020	Browntop millet	Local	-	Value addition and market linkage	Demonstration on Browntop millet for value addition and market linkage	Khariff 2020	M	M	L	Brown top millet
	Vegetables												
		Irrigated	Summer 2021	Tomato	Arka Abedh	-	ICM		Summer 2021	L	L	M	Groundnut
		Irrigated	Summer 2020	French Bean	Arka Arjun	-	ICM	Arka Arjun AMC: 20g /lit Vegetable Special- 2gm /lit & Neem soap : @ 7 g/lit	Rabi 2020	M	L	M	Ragi
		Irrigated	Rabi 2020	Chilli	ArkaHarita		ICM	ArkaHarita -F1 hybrid- AMC 20g/lit	Rabi 2020	M	M	L	Groundnut

								Vegetable Special- 3gm /lit, Yellow sticky traps Neem Soap @7 gm /lit					
		Irrigated	Rabi 2020	Chilli	ArkaHarita		ICM	ArkaHarita -F1 hybrid- AMC 20g/lit Vegetable Special- 3gm /lit, Yellow sticky traps Neem Soap @7 gm /lit	Rabi 2020	M	L	M	Ragi
		Irrigated	Summer 2020	Bhendi	-	ArkaHaritha	IPDM	• ArkaNikitha - F1 hybrid , AMC : Drenching @ 10ml /lit • Vegetable Special- 2gm /lit at starts at flower initiation stage and regular 15 days interval	Summer 2020	M	L	M	Fallow
	Flowers												
		Irrigated	Rabi 2020	Tuberose	ArkaPrajwal	-	ICM	Demonstration of tuberose variety ArkaPrajwal	Rabi 2020	M	L	M	Ragi
	Ornamental												
	Fruit												
		Irrigated	Kharif2020	Pomegranate	Bhagva	-	Organic farming	Demonstration of AMC liquid and ArkaActino Plus on growth, quality and yield of Pomegranate	Kharif2020	L	M	M	Nil
	Spices and condiments												
	Commercial												
	Plantation												
		Irrigated	Kharif2020	Arecanut	Local	-	ICM	Neem cake-2kg per tree, French bean seeds-10kg/ acre, COC- 10g per lit water, Hexoconazole -3 ml per 125ml water	Kharif2020	M	M	H	Nil
	Fodder												
		Irrigated	Rabi 2020	Fodder Sorghum	CoFS 29	-	Fodder	Fodder Seeds CoFS 29 and AMC	Rabi 2020	M	M	L	Ragi
		Irrigated	Rabi 2020	Marvel Grass	Marvel grass	-	Fodder	Fodder Stem Cuttings	Rabi 2020	M	M	L	Ragi
		Irrigated	Rabi 2020	Napier	Hybrid Napier	-	Fodder	Fodder Stem Cuttings	Rabi 2020	L	M	M	Nil

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)				% Increase	Economics of demonstration (Rs./ha)			Economics of demonstration (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
							H	L	A								
Oilseeds																	
Pulses																	
Cereals																	
	Demonstration of water saving Aerobic Paddy Paustic-9	Paustic-9	-	Irrigated	10	2	36.2	27.6	32.90	26.70	23.20	56917	30167	2.13	46191	18641	1.68
Millets																	
	Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition	DHFt 109-3	-	Rainfed	10	4	16.3	15.02	**15.66**	**12.90**	**20.93**	**27,300**	**51,340**	**1.88**	**25,800**	**42,280**	**1.63**
	Demonstration of Finger millet Variety KMR 340 for Value Addition	KMR-340	-	Rainfed	10	4	24.81	23.60	**24.20**	**19.60**	**23.46**	**35,680**	**88,600**	**2.48**	**33,480**	**53,980**	**1.61**
	Demonstration on Browntop millet for value addition and market linkage	Local	-	Rainfed	10	4	On going										
	Enhancement of productivity of Finger millet by drought tolerant variety KMR-630	KMR-630	-	Rainfed	10	04	40.2	29.3	38.30	28.50	34.30	84260	58785	3.30	62700	36130	2.30
Vegetables																	
	Bhendi: ArkaNikitha -F1 hybrid AMC : Drenching @ 10ml /lit Vegetable Special- 2gm /lit	-	ArkaNikitha -	Irrigated	05	02	226.40	202.30	212.6	186.6	13.93	170080	111730	2.91	149280	86920	2.39
	French bean seeds 40 kg, Neem soap 5gm /lit, Jeevamrutha- 2000 liter/ha	ArkaSharath	-	Irrigated	05	01	124.2	100.4	112.2	91.9	22.10	168300	135169	5.07	137850	101597	3.80

	Arka Arjun AMC: 20g /lit Vegetable Special- 2gm /lit & Neem soap : @ 7 g/lit	Arka Arjun	-	Irrig ated	05	01	81	75	78	62.70	24.40	1,56,080	1,19,304	4.24	1,25,400	87518	3.31
	Arka Arjun AMC: 20g /lit Vegetable Special- 2gm /lit & Neem soap : @ 7 g/lit	Arka Arjun	-	Irrig ated	05	01	79	71	76.5	63.20	21.04	1,53,000	1,16,550	3.20	1,26,400	88,420	2.33
	ArkaHarita -F1 hybrid- AMC 20g/lit Vegetable Special- 3gm /lit, Yellow sticky traps Neem Soap @7 gm /lit	Arka Harita	-	Irrig ated	05	01	230.5	217.6	225.4	179.8	25.36	270480	211700	4.60	215760	154980	3.54
Flowers																	
	Demonstartion of Tuberose variety – ArkaPrajwal	ArkaPrajwal	-	Irrig ated	05	01	Results awaited										
Ornamental																	
Fruit																	
	Demonstration of AMC liquid and ArkaActino Plus on growth, quality and yield of Pomegranate	Bhagva	-	Irrig ated	03	02	98	86	91	79	15.20	677950	579825	6.91	529300	382875	2.60
Spices and condiments																	
Commercial																	
Fibre crops like cotton																	
Medicinal and aromatic																	
Fodder																	
	Fodder Seeds CoFS 29 and AMC	CoFS 29	-	Irrig ated	10	1	0	0	105.4	82.42	27.83	42160	9461	2.1	32980	5528	1.8
Plantation																	

	Neem cake-2kg per tree, French bean seeds-10kg/ acre, COC-10g per lit water, Hexoconazole -3 ml per 125ml water in Arecanut	Local	-	Irrigated	05	1	11.9	9.7	11.1	9.2	20.60	324097	241208	3.91	227470	145345	2.77
	Enterprise																
	EDP-Tamarind	Local		Rain fed	01	On going											
	Nutrition Security	IIHR Varieties and Local		Rain fed	30		79.1	68.2	73.65			25000	61030	2.44			

* 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

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**
Aerobic Paddy - Plant Height (cm) No of tillers (nos)	94.5 22.4	88.4 9.4
Ragi- Plant Height (cm) % Blastincidence	125 0.0	107 21.30
French bean -Plant Height (cm) Root length (cm)	63.7 16.1	42.9 12.3
Chilli -No. of fruits /plant	210	193
Chilli -No. of fruits /plant	190.2	169.30
French bean- No. of pods /plant	34.30	27.40
Pomegranate – Wilt (%) Fruit Blight (%)	1.2 18.2	7.1 46.4
Arecanut - Anaberoga (%)	2	6
Demonstration of Finger millet Variety KMR 340 for Value Addition (A) Plant height (cm), (B) Productive tillers (no.), (C) Strawyield (t/ha), (D) Malt price (Rs/kg), (E) Mixture (Rs/kg), (F) Papad (Rs/kg), (G) Laddu (Rs/kg), (H) Ragi Biscuit (Rs/kg)	(A) 119.40 (B) 6.40 (C) 5.28, (D) 200, (E) 250, (F) 250, (G) 300, (H) 350	(A) 111.32 (B) 4.80, (C) 4.92D) 160, (E) 220, (F) 200, (G) 250 (H) 300
Demonstration of foxtail millet Variety DHFt 109-3 for Value Addition	(A) 124.20, (B) 5.90,(C) 2.68	(A119.80,(B) 5.08, , (C) 2.14

(A) Plant height (cm), (B) Productive tillers (no.), (C) Straw yield (t/ha),		

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**
ICM in Chilli –Arka Harita	Arka Harita hybrid gives high yield and pungency, Less leaf curl incidence and fetches good price in the market compared to local.	**Nil**
ICM in French bean –Arka Arjun	Arka Arjun was found to be more profitable with an additional income of Rs. 27,498 per ha as compared to Local during summer.	**Nil**
Arka Nikitha Bhendi Hybrid	• Arka Nikitha -F1 hybrid : 125 -130 days duration, tolerant to Bhendi yellow vein Mosaic and Yields 21-24 t/ha • Timely availability of seeds must be ensured	Market acceptability should be improved.
Arka Abedh Tomato Hybrid	**Arka Abedh** High yielding F_1 hybrid with multiple disease resistance to Tomato Leaf Curl Disease, Bacterial wilt, Early blight and Late blight semi-determinate with dark green foliage, Fruits are firm, oblate round & medium large (90-100g).Suitable for summer, *kharif* & *rabi* cultivation . Bred for fresh market & yields 70-75 t/ha in 140-150 days.	Seeds availability should be ensured.
Demonstration of water saving Aerobic Paddy Paustic-9	The new variety required 40% less water compared to flooding. Increased the Aerobic Paddy yield by 23.2 % compared to farmers practices	Nil
Enhancement of Productivity of Finger millet short duration variety KMR 340	No Blast incidence, Short duration and high yielding	Nil
Demonstration of AMC liquid and ArkaActino Plus on growth, quality and yield of Pomegranate	Application of liquid AMC and ACT have increased the fruit yield, reduced the disease incidence and improved the fruit quality. Reduced the cost of cultivation by Rs.48,300/- per ha. Increased the Pomegranate yield by 15.19 % compared to farmers practices	Nil
ICM in Arecanut	French bean Intercropping has resulted in additional income of Rs. 95,863/ha.ICM in Arecanut increased the income up to 20.60% as compared to check	Nil

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			Check if any		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
						H	L	A								
Dairy																
Poultry																
Rabbitry																

Pigerry																
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

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

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

5. B4. Feedback on livestock technologies demonstrated

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

5.B.5. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m^2)	Name of the parameter with unit	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./unit)			*Economics of check (Rs./unit)		
						Demo			Check if any		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
						H	L	A								
Common carps																
Mussels																
Ornamental fishes																
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
H-High L-Low, A-Average

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

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

5. B6. Feedback on fisheries technologies demonstrated

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

5.B.7. Other enterprises

Enterprise	Name of the technology demonstrated	Variety / species	No. of Demo	Units / Area {m^2}	Name of the parameter with unit	Yield				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)			*Economics of check (Rs./unit) or (Rs./m2)		
						Demo			Check if any		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
						H	L	A								
Oyster mushroom																
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
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
H-High L-Low, A-Average

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

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

5. 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 labour saved (viz., reduction in drudgery, time etc.)

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

5. B10. Feedback on farm implements demonstrated

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

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

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days			
2	Farmers Training			
3	Media coverage	01	05	
4	Training for extension functionaries			
5	Others (Please specify)			

FLD - Enhancement of Productivity of Finger millet by drought tolerant variety KMR 630

FLD - Integrated Crop Management in French Bean – Arka Arjun

FLD - Integrated Crop Management in Chilli – Arka Harita

FLD - Demonstration of Tube rose variety Arka Prajwal

FLD - Demonstration of water saving Aerobic Paddy Paustic-9

FLD - Demonstration of AMC liquid and ArkaActino Plus on growth, quality and yield of Pomegranate

FLD - Integrated Crop Management in Arecanut

FLD - Demonstration of Fodder Sorghum CoFS 29

FLD - Demonstration of Finger millet Variety KMR 340 for Value Addition

FLD - Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition

FLD - Demonstration of Brown Top Millet for Value Addition and Market linkage

FLD – ICM in Tomato

FLD – Nutri Garden at Badavanahalli

FLD – Nutri Garden at Thanganahalli

PART VI – DEMONSTRATIONS ON CROP HYBRIDS(2020)

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)			*Economics of check (Rs./ha)		
					Demo			Check		Gross Return	Net Return	** BCR	Gross Return	Net Return	** BCR
					H	L	A								
Cereals															
Bajra															
Maize															
Paddy															
Sorghum															
Wheat															
Others (pl.specify)															
Total															
Oilseeds															
Castor															
Mustard															
Safflower															
Sesame															
Sunflower															
Groundnut															
Soybean															
Others (pl.specify)															
Total															
Pulses															
Greengram															
Blackgram															
Bengalgram															
Redgram															
Others (pl.specify)															
Total															
Vegetable crops															
Bottle gourd															
Capsicum															
Others : Bhendi	Bhendi: ArkaNikitha - F1 hybrid AMC : Drenching @ 10ml /lit Vegetable Special- 2gm /lit	Arka Nikitha	05	02	226.40	202.30	212.6	186.6	13.93	170080	111730	2.91	149280	86920	2.39
Total															
Cucumber															
Tomato															
Brinjal															
Okra															
Onion															
Potato															
Field bean															
Others (pl.specify) Chilli	ICM in Chilli	Arka Harita	05	1	230.5	217.6	225.4	179.8	25.36	270480	211700	4.60	215760	154980	3.54
Total															
Commercial crops															
Sugarcane															
Coconut															
Others (pl.specify)															
Total															
Fodder crops															
Maize (Fodder)															
Sorghum (Fodder)															
Others (pl.specify)															
Total															

H-High L-Low, A-Average

*Please ensure that the name of the hybrid is correct pertaining to the crop specified

Feedback on crop hybrids demonstrated

Name of crop hybrid demonstrated	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
ICM in Chilli –Arka Harita	Arka Harita hybrid gives high yield and pungency, Less leaf curl incidence and fetches good price in the market compared to local.	**Nil**
Arka Nikitha Bhendi Hybrid	• Arka Nikitha -F1 hybrid : 125 -130 days duration, tolerant to Bhendi yellow vein Mosaic and Yields 21-24 t/ha • Timely availability of seeds must be ensured	Market acceptability should be improved.

PART VII. TRAINING(2020)

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										

Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing										
Others (pl.specify)										
Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Animal Disease Management										
Feed and Fodder technology										
Production of quality animal products										
Others (pl.specify)										
Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify) Mushroom Spawn Production	1	27	0	27	0	0	0	27	0	27
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	1	21	0	21	0	0	0	21	0	21
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										

Others (pl.specify)										
Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify) Technological products and activities of KVK	1	21	8	29	0	0	0	21	8	29
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**3**	**69**	**8**	**77**	**0**	**0**	**0**	**69**	**8**	**77**

On campus training on Dragon and Plantation crops production Extension functionaries








On Campus ASCI Training on Mushroom Grower


On Campus ASCI Training on Organic Farming

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/Irrigation										
Seed production										
Nursery management										
Integrated Crop Management	1	24	5	29	0	0	0	24	5	29
Soil and Water Conservation	1	18	1	19	0	0	0	18	1	19
Integrated Nutrient Management										
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl.specify)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	1	21	0	21	0	0	0	21	0	21
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl.specify) Dryland Horticulture	1	55	5	60	0	0	0	55	5	60
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										

Others (pl.specify)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl.specify)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl.specify)										
Soil Health and Fertility Management										
Soil fertility management	9	234	34	268	0	0	0	234	34	268
Integrated water management										
Integrated nutrient management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing	1	62	0	62	0	0	0	62	0	62
Others (pl.specify)										
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	5	0	94	94	0	0	0	0	94	94
Design and development of low/minimum cost diet										

Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify) Mushroom Spawn Production	1	28	13	41	0	0	0	28	13	41
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	1	40	6	46	0	0	0	40	6	46
Integrated Disease Management	1	36	0	36	0	0	0	36	0	36
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl.specify)										
Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl.specify)										
Production of Inputs at site										

Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom production										
Apiculture										
Others (pl.specify)										
CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
Others (pl.specify)										
Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (Pl. specify)										
TOTAL	**22**	**518**	**158**	**676**	**0**	**0**	**0**	**518**	**158**	**676**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	1	18	2	20	0	0	0	18	2	20
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
ICM in Coconut	1	22	0	22	0	0	0	22	0	22
TOTAL	**2**	**40**	**2**	**42**	**0**	**0**	**0**	**40**	**2**	**42**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture	1	18	2	20	0	0	0	18	2	20
Mushroom Production	2	34	12	46	0	0	0	34	12	46
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
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	**3**	**52**	**14**	**66**	**0**	**0**	**0**	**52**	**14**	**66**

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	0	68	68	0	0	0	0	68	68
Any other (pl.specify)										
Total	**1**	**0**	**68**	**68**	**0**	**0**	**0**	**0**	**68**	**68**

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

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

7.G. Sponsored training programmes conducted

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops										
1.b.	Commercial production of vegetables										
2	**Production and value addition**										
2.a.	Fruit Plants										
2.b.	Ornamental plants										
2.c.	Spices crops										
3.	**Soil health and fertility management**										
4	**Production of Inputs at site**										
5	**Methods of protective cultivation**										
6	**Others (pl.specify)**										
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition										
7.b.	Others (pl.specify)										
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements										
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**										
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management										
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security										
11.b.	Economic empowerment of women										
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics										
12.b.	Others (pl.specify)										
	Total										

Details of sponsoring agencies involved

1.
2.
3.

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
1.e.	Organic farming										
1.f.	Others (pl.specify)										
2	**Post harvest technology and value addition**										
2.a.	Value addition										
2.b.	Others (pl.specify)										
3.	**Livestock and fisheries**										
3.a.	Dairy farming										
3.b.	Composite fish culture										
3.c.	Sheep and goat rearing										
3.d.	Piggery										
3.e.	Poultry farming										
3.f.	Others (pl.specify)										
4.	**Income generation activities**										
4.a.	Vermi-composting										
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
4.c.	Repair and maintenance of farm machinery and implements										
4.d.	Rural Crafts										
4.e.	Seed production										
4.f.	Sericulture										
4.g.	Mushroom cultivation										
4.h.	Nursery, grafting etc.										
4.i.	Tailoring, stitching, embroidery, dying etc.										
4.j.	Agril. para-workers, para-vet training										
4.k.	Others (pl.specify)										
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics										
5.b.	Others (pl.specify)										
	Grand Total										

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

S. No.	Name of Job Role	Date of Start	Date of Close	Total Participants	No. of Participants									Date of Assessment	No of Participants passed assessment
					General			SC/ST			Grand Total				
					Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	Mushroom Grower	22.01.2020	15.02.2020	20	11	9	20	0	0	0	11	9	20	23.01.2021	19
2.	Organic Grower	10.02.2020	06.03.2020	20	19	1	20	0	0	0	19	1	20	21.01.2021	18

Off campus training on Dry land Horticulture at Sajjehosahalli

Off campus training on Dry land Horticulture at Pavagada taluk under SCSP

Off campus training on Pomogranate production at Venkatapura Pavagada

Off Campus training programme on Aloe vera Cultivation at farmers field of Mr Fernandaz at Hirehalli

Off campus training programme on Dryland Horticulture at Bukkapatna

Off campus training on Pomogranate production at venkatapura

Off Campus training programme on Vermi Compost

Off Campus training programme on Mushroom Production

Off Campus training programme on Nutri Garden at Kumbarahalli

Off Campus training programme on Nutri Garden at Badavanahalli

Off Campus training under Tribal sub plan

Off Campus training on Soil Testing and Soil Health Management

Off campus training programme on Coconut coir based bath scrub

PART VIII – EXTENSION ACTIVITIES(2020)

8.1. Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	3	168	85	253	25	10	35	8	5	13
Kisan Mela	2	700	160	860	0	0	0	30	15	45
Kisan Ghosthi	1	50	50	100	0	0	0	0	0	0
Exhibition	2	310	109	419	0	0	0	3	0	3
Film Show	15	380	58	438	15	08	23	2	1	3
Method Demonstrations	1	24	2	26	2	3	5	1	1	2
Farmers Seminar	2	0	0	0	0	0	0	0	50	50
Workshop										
Group meetings	2	30	10	40	0	0	0	30	8	38
Lectures delivered as resource persons	8	489	165	654	67	60	127	61	21	82
Newspaper coverage	5									
Radio talks	04									
TV talks	04									
Popular articles	2									
Extension Literature										
Advisory Services	2526	1980	280	2260	200	50	250	10	6	16
Scientific visit to farmers field	43	229	73	302	13	19	32	6	0	6
Farmers visit to KVK	312	2042	875	2917	0	0	0	43	19	62
Diagnostic visits	36	110	8	118	5	0	5	5	0	5
Exposure visits	2	0	0	0	0	0	0	40	50	90
Ex-trainees Sammelan	1	32	7	39	0	0	0	0	0	0
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
MahilaMandals Conveners meetings										
Celebration of important days (specify)	5	230	114	344	8	5	13	13	16	29
Any Other (Specify)										
Total	**2976**	**6774**	**1996**	**8770**	**335**	**155**	**490**	**252**	**192**	**444**

Celebration of Famers day cum Kissan ghosti was conducted on 23rd Dec, 2020 at KVK, Hirehalli.

World Soil Day Celebration was organized on 5th December, 2020 at Shivanagere village

Field day on Integrated Crop Management in Chilli – Arka Harita

Field day on Fox tail Millet –DHft-109-3 variety

Mahila Kissan Diwas was celeberated at KVK-Hirehalli, Tumakuru

A method demonstration on application of coconut tonic in coconut

Diagnostic Field visit to Problematic field of Drumstick Var. PKM-1

Diagnostic Field visit of Tomato Arka Samrat at Mudigere

Diagnostic Field visit to Coconut and Arecanut orchard

Diagnostic Field visit to Problematic field of Coconut and Arecanut orchard

Gandhi Jayanthi programme was organized at ICAR-KVK, Hirehalli campus

Swach Bharat activity at ICAR-KVK, Hirehalli campus

8.2 Special Extension Programmes

Nature of Extension Programme	Date(s) conducted	No. of farmers (General)			No. of farmers SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Jal Shakti Abhiyan										
Fertilizer Use Awareness Campaign										
National Animal Disease Control Programme										
Tree Plantation Campaign	29.9.2020	15	6	21	2	2	4	2	0	2
Any other, Pl.specify Awareness programme on tribal sub plan project	22.6.2020				50	2	52	5	0	5
Food and Nutrition security	17.7.2020 23.7.2020 24.7.2020		60	60						
PoshanAbhiyan	16.9.2020		52	45		8	8			

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)	Ragi	KMR 630	6.5	26000	
	Navane	DHFT 109-3	1.02	4080	
Oilseeds					
Pulses					
Commercial crops					
Vegetables	Okra	Arka Anamika	0.80	32000	14
Flower crops					
Spices					
Fodder crop seeds	Fodder sorghum	Co(FS)-31	0.20	8000	12
Fiber crops					
Forest Species					
Others (specify)					
Spawn	Mushroom	Oyster	13.68	102600	28
	Arecanut Seed Nuts (Loose) – Nos.	Hirehalli Tall	1200 Nos	3600	2
	Arecanut Seed Nuts (Degraded)	Hirehalli Tall	12.33	37000	1
	Arecanut Seed Nuts (Auction)	Hirehalli Tall	-	6,21,000	1
Total			**34.53**	**8,34,280**	**32**

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	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Commercial						
Vegetable seedlings						
	Drumstick Seedlings	PKM-1	-	2051	30765	12
Fruits						
	Papaya Seedlings	ArkaPrabhath	-	2936	35232	15
	Acid lime Seedlings	Local	-	5323	372610	145
	Tamarind Seedlings	PKM-1	-	800	56000	32
	Amla Grafts	NA7	-	1129	79030	40
	Guava Grafts	Allahabad Safed, ArkaMridula and Arka Kiran	-	5522	386540	115
	Jamun Seedlings	Dhupadala	-	290	20300	22
	Mango Grafts	Alphanso, Mallika&Dashehari	-	3836	268520	112
	Pomello Seedlings	Devanahalli Local	-	881	35240	135
	Custard Apple Seedlings	Balnagar	-	379	26530	42
	Lakshmana Phala Seedlings	Local	-	1202	48080	152
	Rose Apple Seedlings	Local	-	348	13920	66
	Cherry Seedlings	Local	-	32	1280	12
Ornamental plants						
Medicinal and Aromatic						
Plantation						
	Arecanut Seedlings	Hirehalli Tall	-	1720	68800	5
	Arecanut Sprouts	Hirehalli Tall	-	30578	214046	55
Spices						
Tuber						
Fodder crop saplings						
	Napier Grass Cuttings	Napier	-			
	Guinea Grass Cuttings	Guinea	-			
Forest Species						
Others(specify)						
	Tamarind Scions	PKM-1		600	1200	2
Total				**52640**	**1658093**	**962**

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

Crop category	Name of crop	Name of the hybrid	Number	Value (Rs)	Number of farmers to whom provided
Fruits	Mango	Mallika	1820	127400	48
Total			1820	127400	48

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	AMC powder	31.99	447860	589
	AMC Liquid(100 Litre)	42.00	1049322	394
Bio-pesticide				
	Neem Soap	3729	969540	1243
	Pongamia Soap	1408	295680	591
Bio-fungicide				
Bio Agents	Pheromone traps and lure	10586	211720	213
Others (specify)				
	Arka Borer Control	418	62700	64
Micro Nutrient Formulation	Banana Special	94.60	1517520	1100
	Vegetable Special	18.23	299040	328
	Mango Special	66.25	1084530	935
	Citrus Special	58.45	1206440	716
Total		**16452.52**	**7144352**	**6173**

Home Science Products	Quantity (Kg.)	Value (Rs.)	Number of farmers to whom provided
Amla Candy	62	18600	180
Amla Squash in Ltrs	306	39780	107
Ragi Malt	162	12400	126
Others (specify)			
Total	**530**	**70780**	**413**

9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows & Bulls	Hallikar	7	141000	7
Buffaloes				
Calves				
Others (Pl. specify) Sheep	Bannur	01 (30 Kg.)	9000	1
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		**8**	**150000**	**8**

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

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

(A) KVK Newsletter:
Date of start:_____ Periodicity:_____Copies printed in each issue:_____

(B) Literature developed/published

Item	Number
Research papers- International	01
Research papers- National	04
Technical reports	06
Technical bulletins	01
Popular articles - English	-
Popular articles – Local language	06
Extension literature	02
Others (Pl. specify)	
Abstract	02
TOTAL	**22**

10.B. Details of Electronic Media Produced

S. No.	Type of media	Title	Details
1	CD / DVD	ICAR-KVK Hirehalli : A glance Farm pond for Rain water harvesting and improving livelihood of farmers. Renovation of Check dam for recharge of open well and bore well Dry land horticulture- Amla (Indian gooseberry for improving livelihood of farmers	Activities of KVK Shorts videos
2	Mobile Apps	NIL	
3	Social media groups with KVK as Admin	eHorticulture,WhatsApp Group	Knowledge sharing and diagnosis of pest & disease based on images shared by farmers.
4	Facebook account name	iihrkvk https://www.facebook.com/iihr.kvk	Dissemination of IIHR Technologies and KVK Updates and Activities
5	Twitter	https://twitter.com/iihrkvk	Dissemination of IIHR Technologies and KVK Updates and Activities
6	Instagram account name	kvkiihr	Dissemination of IIHR Technologies and KVK Updates and Activities

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

1. Title :Economic empowerment by adoption of High value crops by using rain water harvested through Farm Pond and recharged open well.

Introduction: Mr.Kemparaju is a 25 years old small farmer from the village Durgada Nagenahalli in Korategere taluk of Tumakuru District, Karnataka. Few years before he used to cultivate groundnut and finger millet in his 1.75 acre land. He never tried his luck in highly remunerative crops like vegetables and flowers owing to the lack of the scarce resource – water. Though he had an open well, water was not sufficient for these water intensive crops, refraining him to get any additional income.

Krishi Vigyan Kendra, Hirehalli, Tumakuru, encouraged him to go for a farm pond under NICRA (National Innovation in Climate Resilient Agriculture) Project supported by ICAR-CRIDA (Indian Council of Agricultural Research - Central Research Institute for Dryland Agriculture), Hyderabad through Zonal Project Directorate – VIII, Bengaluru. Initially he was reluctant, considering the loss of area. But, after consultation with the KVK staff, finally he agreed on realizing the benefit out of this intervention. Incidentally, there was an old boulder check dam along a water channel adjacent to his field. So, it was decided to renovate that check dam by desilting the water channel, stone pitching and heightening its walls with concrete measures. The idea was to improve the water holding capacity of the structure and divert the excess water stored, into a dug out pond. A farm pond of 40m X 12m X 3 m was dug up within his field with a capacity of about 1400 cum. This pond occupied about 0.15 acre of his land.

Though the year 2014 was comparatively better with higher rain fall (54% in June, 66% in Aug and 76% in Sep, than the previous year), there were mid season dry spells in between. From June 22nd (6.0 mm) to July 11th (31.0 mm), there was no rain at all. So, drought tolerant varieties in crops like finger millet and groundnut could sustain this dry spells, but none can think of going for vegetables. At the same time, the potential of a good monsoon (95.0 mm in June and 71.1 mm in July) could not have been tapped fully, unless the rain water was harvested properly. So, if a proper rain water harvesting structure is established, there could be a good chance of irrigating additional remunerative crops.

In previous years, he used to get a net profit of about Rs.14,000 from groundnut and finger millet in his field. In the year 2013, when he started harvesting rain water and cultivating tomato crop (in 0.5 acre), the net income from tomato was about Rs.22,000. This is in addition to the income of about Rs.10,000 from finger millet and groundnut in the remaining areas (1.10 acres). Gaining the confidence from this venture, in the year 2014, he extended his area of vegetable crops from 0.5 to 1 acre. By this, the additional income reached above Rs.50,000 from Tomato, Carrot and Aster flower in this area.

Before NICRA						
Crop	**Area (acre)**	**Yield**	**Cost (Rs.)**	**Gross benefit (Rs.)**	**Net benefit (Rs.)**	**B:C ratio**
Finger millet	1.0	8 q	5,200	12,000	6,800	2.3
Groundnut	0.75	3.8 q	2,800	9,800	7,080	3.5
		Total	**12000**	**41800**	**13880**	
After NICRA						
Crop	**Area (acre)**	**Yield**	**Cost (Rs.)**	**Gross benefit (Rs.)**	**Net benefit (Rs.)**	**B:C ratio**
Aster	0.4	8.5 q	6,100	20,400	14,300	3.3
Tomato	0.4	1.7 t	5,850	25,500	19,650	4.3
Carrot	0.2	1.2 t	4,550	24,000	19,450	5.3
		Total	**21500**	**104900**	**53400**	

He was Involved as a Committee Member in the *Prime Minister Krishi Sinchay Yojana* (PMKSY) programme of GOI in the State Department of Agriculture, Tumakuru and participated in the regular meetings organized by District Magistrate, Tumakuru in this regard. He was also involved as a Committee Member in the *Prime Minister Bima Fasal Yojana* (PMBMY) programme of GOI in the State Department of Horticulture, Tumakuru and participated in the regular meetings organized by District Magistrate, Tumakuru in this regard.



Farm Pond- Rain water harvesting Open well recharged from Farm PondChina Aster Demo Plot

2. Title :Successful Entrepreneurs: Hallisri SHG

Introduction: Finger Millet is the main staple food consumed by majority of the people in South Karnataka as it is major source of dietary carbohydrates. This is comparable to rice with regard to protein and fat and is superior to rice and wheat with respect to mineral and micronutrient contents. In order to develop the value added food products based on Finger Millet, that can able to enrich the nutritional value and also beneficial for good health is the current need for the wellbeing of the society.Value addition and helps in creating jobs and thus plays a crucial role in the economic progress in the rural areas. In view of this, demonstrations were undertaken to enhance the income of finger millet growing farmers by increasing productivity by using improved varieties and strengthening the capacity of farming community for processing, value addition and market linkage.

ICAR- Krishi Vigyan Kendra (IIHR) Tumakuru-had conducted EDP programme on Processing, Value addition, Branding and Market linkage in Finger Millet. To enhance the income of finger millet growing farmers by increasing productivity and for strengthening the capacity of farming community for value addition and marketing of value added products, demonstration was undertaken on EDP mode during 2016-17. Initially Active women self-help groups are identified and a series of training programmes were arranged to give hand-on experience on preparation of Finger Millet products (Finger Millet Malt, Finger Millet mixtures, Finger Millet laddu, etc), quality control measures, labelling and marketing linkage of the products. This was demonstrated to HallisriSHG groups at Thovinakere of Koratagere Taluk.

The result of value added products from Finger Millet showed that, groups received higher income compared to selling Finger Millet as it is. There has been an increase in the interest of other group members to take up processing and value addition to Finger Millet as an income generation and entrepreneurial activity. The benefit cost ratio of different value added products ranges from 1.55 to 1.66, here just by processing and value addition the profit margin is up to 1.66 times and demand for these products is also more.

Sl no	Products name	Cost/ kg	Qty produced in kg	Gross cost (Rs)	Gross income(Rs)	Net Income(Rs)	B:C Ratio
1	Finger Millet malt	200	200	18000	40000	22000	2.22

2	Finger Millet Laddu	280	100	18000	28000	10000	1.55
3	Finger Millet Mixture	200	50	6000	10000	3500	1.66
4	Finger Millet chakkali	180	100	11200	18000	3200	1.60

The value added products of Finger Millet were first commercialized by the SHGs during Krishi Melas, meetings, training progammes organized by different government organizations and private organizations. Now they are preparing and giving to organic shops in Tumakuru as and when the order comes.

Display exhibits at Organic Millet Mela at Tumkur

3. Title:Success story of Mushroom grower

Introduction : Mr.Raghavendra, 30 years old person is involved in mushroom cultivation from last 2-3 years. He resides in Ammasandra village of Turuvekere taluk in Tumakuru district. Before starting mushroom cultivation, being a diploma graduate, earlier he was working in a private company in Bengaluru. Then he thought of doing something new independently instead of working under the control of some one. Initially he started cultivating oyster mushroom in small shed. Later he came into contact with ICAR-KVK, Hirehalli through his relative who was also a mushroom grower and buyer of spawn from our Krishi Vigyan Kendra.

Mr Raghavendra attended 25 days skill training programme on Mushroom grower under ASCI-skill Council of India programme during 2019-20 at Krishi Vigyan Kendra, Hirehalli. Then he established his mushroom cultivation unit in a bigger way. He started cultivating Oyster mushroom in two bigger units with partnership. Initially He was able to produce 15- 20 kgs of mushroom. Later he started to produce 200-300 kg of mushroom per month. He started to send mushroom to Bengaluru for marketing. Now he started selling the mushroom in Tumakuru city trough an entrepreneur lady who sells food products with a brand name of “Aishwarya Products”. With this self-employment he is earning nearly Rs. 25000/- to Rs. 30000/- per month.

Mr Raghavendra wants to expand his mushroom further and he is working hard on that. He believes that getting associated with mushroom is the best thing that has happened to him. “My earnings are good and I am happy. I want to expand it further. Mushroom cultivation has helped me support my family and changed my life” he said. He encourages others to take up mushroom cultivation too. He is an inspiration for many other mushroom farmers. His success story has been a source of motivation for a lot of people to take up mushroom cultivation as a means of livelihood.


Mushroom Production Unit

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

Arka Borer Control (ABC) is an organic formulation in paste form developed by ICAR-Indian Institute of Horticultural Research, Bengaluru to manage tree borers especially mango borer. The formulation is non-toxic, non-poisonous to humans, animals and as well to the other fauna and flora in eco system.

ABC was licensed during the year 2019-20 by our KVK and produced in large scale and supplied to farmers through out the country. So far we have produced 856 Kgs and sold to the farmers.

Arka Mushroom Fortified Rasam Powder is an instant rasam mix. This has been standardized with an objective to add nutrition to a daily diet product 'Rasam' used daily in every South Indian home. Daily intake of mushroom fortified instant rasam mix will not only help in enhancing nutrition but can also enhance income of rural women who can start an entrepreneurial activity of producing this as cottage industry. Since the mushroom fortified instant rasam mix is made from dehydrated oyster mushrooms; it can be an important technology to solve the short life of oyster mushrooms and enhance oyster mushroom production in India. This technology was licensed during the year 2019-20 by our KVK from ICAR-IIHR. The benefits of this technology is being shared during the training programmes.

Sales Software system: To support KVK Sales activity, a sales software was introduced in 2019-20. The licenses was purchased and activated during the July 2020. The facility includes the barcoding system. It helps in speedy process of sales of KVK Products on daily basis. This also helps in preparing the bills in quick time, hassle-free transaction, easy to maintain the accounts and availability of sales data and other details for verifying and documenting for administrative and other academic usages.

Farmer Innovations: ICAR- ATARI Bengaluru has made an effort to document farmers' innovations in the form of a publication "Reimagining Agriculture: Farmer Innovations", for the benefit of everyone in the farming system. This document collates the efforts of farm innovators in the thematic area of nursery management (2), varietal development, cropping system (3), resource management (3), livestock management (5), fodder production (3), processing and value addition (4),wild life management (3),and farm mechanization (11). A total of 35 profiles of innovators are presented by 22 KVKs across Karnataka. Each one throws light on their simple yet useful ideas and innovative practices. Scientists of KVK, Hirehalli, have involved in collecting the details of the innovations and the innovators for this publication.

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)			
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

Mr.Srinivas Reddy, Pavagada Progressive Farmer awarded during Farmers Day 2020.

Ms. Gowramma Veerabhadriah, Chikkahalli Received Best Farmer Award for Tumakuru Taluk Krishi Mela-2020 at GKVK Bengaluru

PART XI – SOIL AND WATER TEST

11.1 Soil and Water Testing Laboratory

A. Status of establishment of Lab :

1. Year of establishment :2014
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost	Status
Sl. No	Name of the Equipment	Qty.	Cost	Status
1	Spectrophotometer with accessories	1	1,81,260	Working
2	Flame photometer	1	53,238	Working
3	Analytical balance	1	28,625	Working
4	Nitrogen Analyzer (Kjeldahl digestion and distillation unit) with spare parts	1	1,79,879	Working
5	Shaker	1	45,800	Working
6	Refrigerator	1	40,200	Working
7	Oven	1	60,456	Working
8	Hot plate	1	18,893	Working
9	Digestion fume chamber	1	99,501	Working
10	Atomic Absorption Spectrophotometer	1	10,00,000	Working
11	Centrifuge	1	58,404	Working
12	Glassware and miscellanies	-	99,258	-
13	Chemicals	-	1,34,465	-
Total		19,99,979		
Sl. No	Name of the Equipment	Qty.	Cost	Status
1	Spectrophotometer with accessories	1	1,81,260	Working
2	Flame photometer	1	53,238	Working
3		Analytical balance	1	28,625

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	**12,841**	**10,645**	**2,398**	**19,37,830**
Water Samples	**7,136**	**6,054**	**1,651**	**5,71,250**
Plant samples	**260**	**47**	**26**	**42,100**
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	**20,237**	**16,746**	**4,075**	**25,51,180**

C. Details of samples analyzed during the 2020:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	958	538	125
Water Samples	378	323	91
Plant samples	18	7	3
Others (specify)	**0**	**0**	**0**
Total	**1,354**	**868**	**219**

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1.Mini Soil Testing Lab	01.03.2017	Not working

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

	During 2019	During 2020	Cumulative progres (Total)
Samples analyzed (No.)	0	0	306
Farmers benefited (No.)	0	0	257
Villages covered (No.)	0	0	63

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		**125**	**538**	**958**	**958**
Mobile Soil Testing Kit	**0**	**0**	**0**	**0**	**0**

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 participate (No.)	Media coverage (No.)
1	**50**	**250**	**NIL**	**2**	**2**	**0**

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)

Enhancement of yield by replacing the old variety with new high yielding one in groundnut crop under NMOOP project:

Pavagada is known to be Groundnut hub in Tumakuru district. Groundnut is grown in area of 30,000 hectares. Incidentally, TMV-2 is the only variety which is grownsince last 50 years. It is believed by the local farmers as a drought tolerant variety. Hence farmers are growing this variety in spite of its low yield. Krishi Vigyan Kendra, Hirehalli has made a concentrated efforts to introduce a new variety called K-6. This is drought tolerant, short duration and high yielding, compared to existing TMV-2. Under National Mission onoil seeds and oil palm (NMOOP), Front Line demonstration were conducted from 2017-18. It was

conducted in cluster mode with 50 hectares, covering 125 farmers in total. The demonstration plot recorded the higher yield of 10.98 qtls/ha, compared to TMV-2 variety(8.89 qtl./ha) and highest B.C ratio (1.90) was also recorded in demonstration plot.

Crop	Variety	Demo area (ha)	Farmers (No.)	Yield (qtl/ha)		Net returns (Rs./ha)		BCR	
				Demo	Check	Demo	Check	Demo	Check
2017-18	K6	50	125	10.70	8.84	24180	16773	2.00	1.73
2018-19	K6	50	125	8.98	6.66	20906	11304	2.54	2.20
Mean				**10.98**	**8.89**	**21612**	**14850**	**2.19**	**1.90**

As a result of this intervention, groundnut area under K-6 variety has increased to 8,900 hectare with the span of three years.

Addressing Drought Vulnerability by Drought tolerant Ragi ML -365

Preamble: Ragi (Eleusinecoracona) is also called as Finger millet. Ragi is the main staple food consumed by majority of the people in South Karnataka. Ragi is grown as rainfed as well as irrigated crop, mostly cultivated by poor and marginal farmers, as it is most nutritious among all cereals and grown as pure crop as well as intercrop with pulses. Ragi is rich in carbohydrates, calcium, fibre, protein and vitamins, contains slow releasing carbohydrates and provides continuous energy and is being promoted as food for diabetics. Ragi is grown in 1.8 million ha with average yield of 13 q / ha in India and 9.16 lakh ha with average yield of 16 q / ha in Karnataka. Ragi is grown in 1.87 lakh ha in Tumakuru district, with an average yield of 18 q / ha, which is comparatively low yield. The main reasons for low productivity are delayed on set of monsoon, low rain fall, erratic rain fall, dry spells, high temperature and non-availability and non-adoption of drought tolerant and high yielding variety.

Input :ICAR- Krishi Vigyan Kendra (IIHR) Tumakuru-had conducted front line demonstration of Ragi ML-365 variety in 25 ha covering 62 farmers at 5 taluks Viz., Tumkur, Sira, Koratagere, Madhugiri and Pavagada taluks of Tumakuru district from 2011 to 2018 as an alternative to the local GutteRagi. The villages selected are vulnerable to climatic variability like drought, dry spells and extreme temperature. The specific characteristics of the Ragi ML-365 variety are short duration (about 105 days), medium plant height, high grain and fodder yielding, resistant to leaf spot, neck blast disease and lodging, good cooking quality, suitable for dryland agriculture and late sowing.

Outcome: The average yield of Ragi ML365 (26 q/ha) is high compared to the local GutteRagi (19 q/ha). Ragi ML-365 grain yield per ha was 7 q higher over local GutteRagi. Ragi ML-365 gave higher net income (Rs. 30,000/-) compared to local GutteRagi (Rs. 16,500/-) per ha and generated additional income of Rs.13,500/- per ha as shown in Table. The results showed an increase of 36.84% over the yield of local GutteRagi variety and additional income increased to 81.81% and also reduced the leaf spot and neck blast disease

Particulars	Avg. Plant height (cm)	Avg. Panicle weight (g)	Avg. Yield (q/ha)	% Increase	Gross Cost (Rs./ha)	Gross Returns (Rs./ha)	Net returns (Rs./ha)	B:C ratio
Demonstration	99.6	26.8	26.44	36.2	15,678	30,450	14,772	1.94
Check	63.2	19.4	19.4		14,448	23,162	8,714	1.60

Impact : The Ragi ML-365 variety performed superior to the existing Local GutteRagi at DurgadaNagenahalli due to resistance to drought and blast. It was also performed well when adopted during delayed monsoon. The variety was up scaled in Tumakuru District through Department of Agriculture, Tumakuru. Ragi ML-365 was cultivated in 3,200 ha in Tumakuru District during 2017-18. Additional production of 22,400 q gave net income Rs. 4.32 crore and benefitted about 8,000 farmers.

Ragi – ML 365

Gutte Ragi local

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

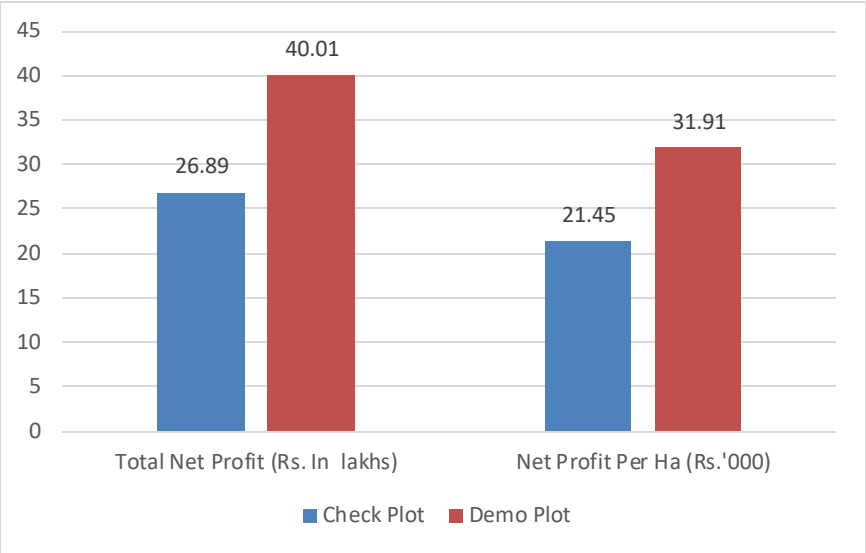
The economic benefits of major FLDs conducted during 2015-2020 was analysed, considering the yield and economic parameters as given blow.

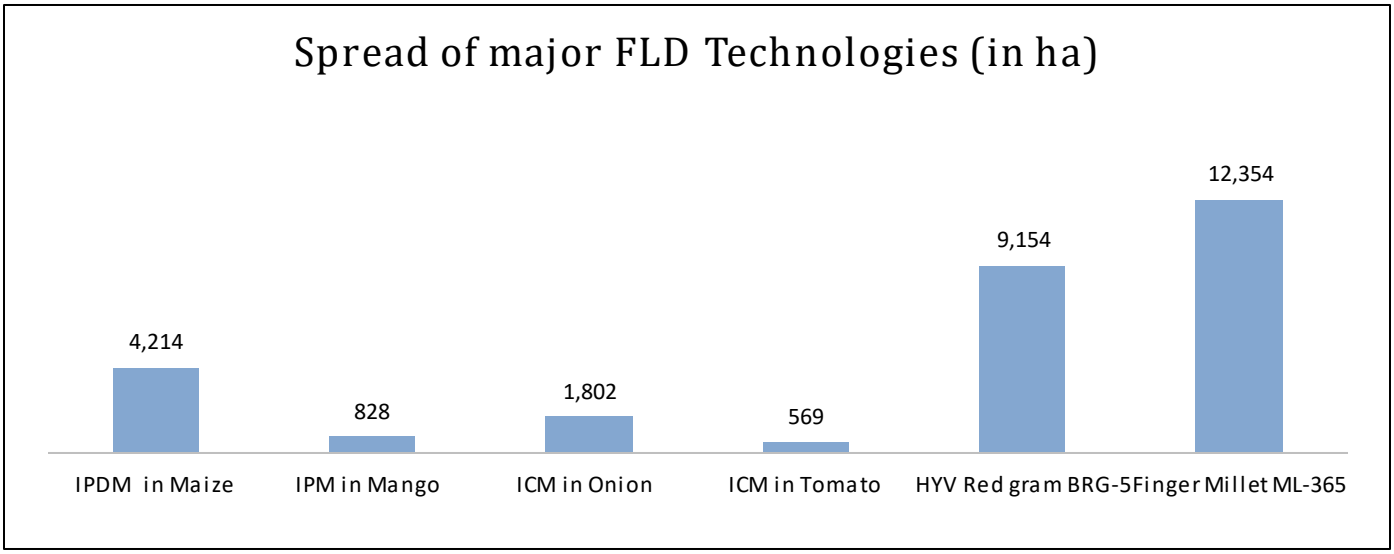
Economics of major Front Line Demonstrations (Crops/Enterprise) during2015-16 to 2019-20

Sl No	Name of the Demonstration	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
				Demo	Check	Increase (%)	Demo	Check	Demo	Check
1	High Yielding Variety K-6 in Groundnut	6	8	10.70	8.84	17.38	24,180	16,773	2.00	1.73
2	Drought Management variety ML-365 in Finger Millet	10	30	29.80	22.75	30.90	21730	13920	1.80	1.60
3	High Yielding Variety BRG-5 in Red gram	20	50	11.68	8.18	42.78	70089	40885	2.49	2.00
4	High Yielding Variety Arka Rakshak in Tomato	4	10	276.20	183.60	33.52	121652	63590	3.75	2.36
5	ICM in Tomato	2	8	746.00	652.00	14.40	252850	186850	4.05	3.50
6	ICM in Onion	8	20	253.40	177.40	42.84	156840	80820	2.72	1.91
7	ICM in Pomegranate	10	20	125.00	95.00	31.50	845000	604600	5.80	5.10
9	PHT in Mango	20	4 Groups	8	6	33.33	230000	100000	3.55	2.35
10	ICM in China Aster	3	10	4.50	3.20	40.60	99725	65600	3.83	3.14
11	Use of AMC in Betlevine	4	20	2.90 lakhs	2.40 lakhs	20.80	34040	11500	1.90	1.30
12	ICM in Marigold	0.4	5	56.00	46.60	20.17	140450	130020	4.60	3.80
13	IPDM in Jasmine	2	10	66.45	40.89	62.50	242804	107214	3.71	2.10
14	Wild Boar Management in Ground nut	4	10	3.84	2.94	28.85	5508	2544	1.38	1.19
15	IPDM in Maize	10	20	35	28	25	27000	20200	2.45	2.24
16	ICM in Tomato Arka Samrat	2	10	612	539	13.5	232550	185520	4.17	3.20
17	Organic farmimng in French Bean	4	10	45	36	25	95000	69500	5.8	3.7
18	Nutrition garden	-	10	4.50	0	100	11300	0	1.40	0
19	Demonstration on fodder CoFS-29 sorghum	4	10	105.4	82.40	27.83	9461	5528	2.1	0
20	Demonstration of water saving Aerobic Paddy Paustic-9	1	5	34.1	27.60	23.5	26323	16378	2.07	1.63
21	ICM in -Bhendi	2	5	206.62	178.84	15.53	126060	92276.00	2.56	2.07
22	ICM in French Bean -Arka Arjun	1	5	78	62.70	24.40	1,19,304	87518	4.24	3.31
23	ICM in Chilli – Arka harita	1	5	224.90	177.50	26.70	211940	157080	4.65	3.8
24	ICM in China aster – Arka Archana	1	5	74.3	60.8	22.2	99420	72626	3.9	2.97
25	Demonstration on Arka Actino plus in Pomegranate	1	5	96	81	18.50	578850	380100	7.2	3.40
26	Demonstration of Aromatic crop-Lemon grass – Krishna	1	1	83.6	-	-	37970	-	2.44	-
27	Demonstration of Aromatic crop-Palmrosa- PRC 1	1	1	204.0	-	-	82300	-	3.51	-
28	Demonstration of Finger millet Variety KMR 340 for Value Addition	2	5	23.6	19.2	22.92	49,668	54,200	2.35	1.72
29	ICM In Arecanut	1	5	10.90	9.40	15.90	168250	124100	3.04	2.68

On analysing the above table, following points of interoperations have been arrived

- About 320 farmers were involved in FLDs in the last five years, covering an area of about 125 ha (On an average 0.4 ha per farmer).
- The total net profit that these farmers obtained by following the KVK's FLDs in the above mentioned technologies is Rs.40.01 lakhs. Whereas the total net profit in the check is Rs.26.89 lakhs. The increase in net profit in demo plots is 49% more than the check plots.
- If we calculate the net profit on per ha basis, it is Rs. 31,905 in demo plots, more than Rs.10,000 compared to check plots (Rs.21,446)
- The technologies demonstrated in about six FLDs have reached more than 500 ha within the district, as per the feedback form line department staff, as mentioned in the graph below.





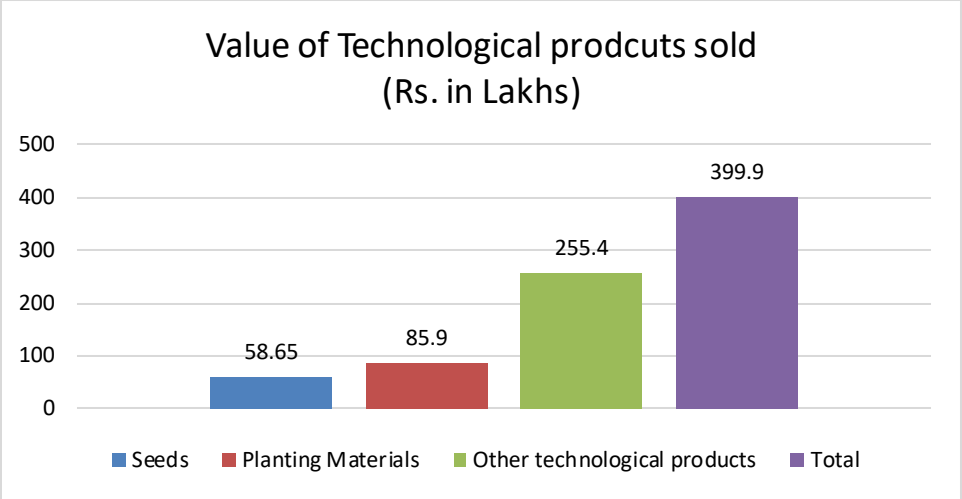
KVK is involved with production of various seeds, planting materials and technological products. Given below is the table that describes the quantity produced, their value and farmers benefitted in the past five years.

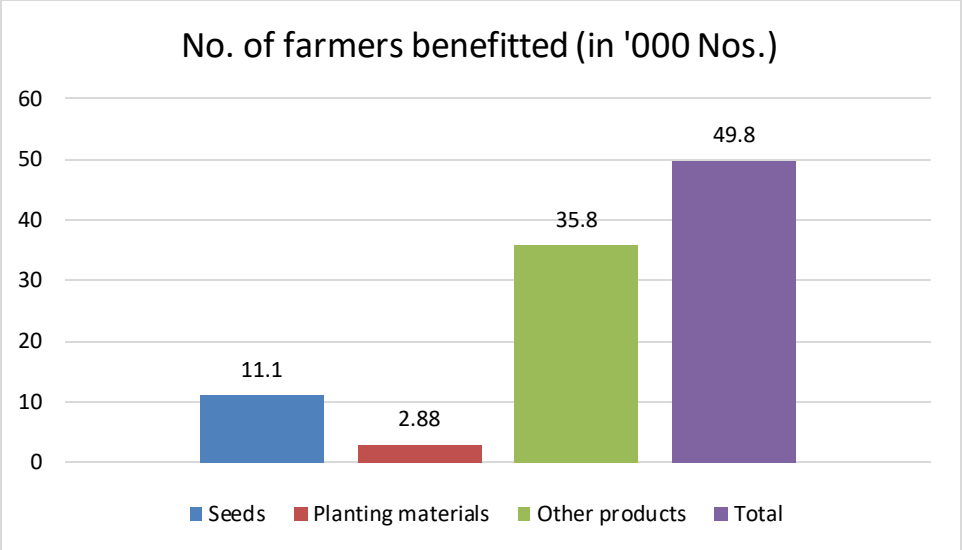
Technology Products produced and made available to farming community (2015-2020)

Particulars	Years																	
	2015-16			2016-17			2017-18			2018-19			2019-20			Total		
	Q	V	N	Q	V	N	Q	V	N	Q	V	N	Q	V	N	Q	V	N
Seeds (Qty-tonnes)	6.9	8.7	0.87	2.5	9.3	2.03	2.6	5.2	7.29	7.4	18.7	4.81	6.8	16.7	2.7	26.3	58.65	11.1
Planting Materials (Qty-'000 Nos)	25.9	4.6	0.65	102	31.3	0.36	91.5	23.1	0.10	59.89	15.3	0.47	40.8	11.6	0.38	320.1	85.9	2.88
* Other Products	--	53.2	7.86	--	4.86	5.17	--	57.3	4.95	--	78.0	8.63	--	62.0	9.17	--	255.4	35.8
Total	32.8	66.5	9.38	104.5	89.2	7.56	94.1	85.6	12.34	67.29	112	13.91	47.6	90.3	12.25	--	399.9	49.8

Q- Quantity, V- Value (in Rs.in Lakhs), N- Number of farmers ('000)

* Other products: Bio-fertilizers, Bio-pest control formulation & traps, Micronutrient mixtures and Home Science Products (Qty - different units)





Given below table explains the details of various technology products/inputs supplied to farmers (in the category of seeds, planting materials and other products) during last five years (2015-2020).

Production and supply of major technology products/inputs to farmers in detail (Quantity in category wise)

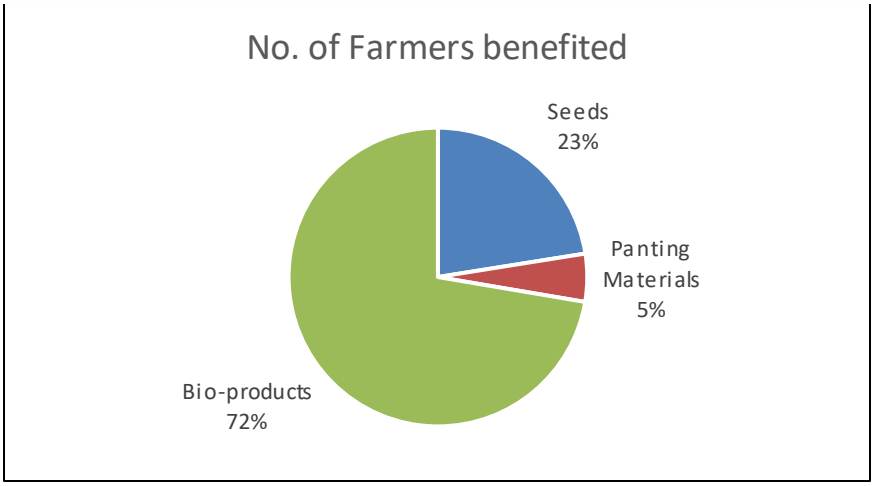
Seed material produced and made available to farmers		**Planting material produced and made available to farmers**		**Bio-products suitable for the district produced made available**		**Other products suitable for the district**	
Crop	**Qty. (Qtl.)**	**Crop**	**No. (in 1000s)**	**Name of the product**	**Qty. (Qtl)**	**Name of the product**	**Qty. (Qtl)**
2015-16							
Cereals	9.44	Fruit crops	10.26	Bio-fertilizers – AMC Powder	23.6	Amla Juice (in ltrs)	310.0
Millets	0.0	Plantation crops	15.75	Bio-fertilizers – AMC Liquid (1000 Ltrs)	0.0	Amla Candy	2.8
Vegetables	3.50	Fodder	0	Bio-pest control formulations	46.5	Finger Millet Malt	1.0
Pulses	12.0	Vegetables	0	Micro-nutrient mixtures	183	Mushroom spawn	4.0
Oilseeds	40.0	-	-	Pheromone traps	0.8	-	-

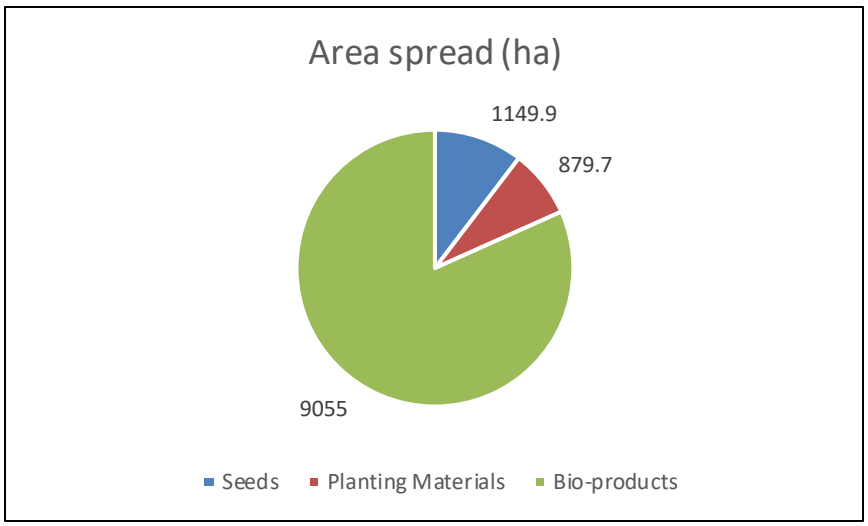
				(1000 Nos.)			
Vegetable seed kits (1000 Nos.)	5	-	-			-	-
2016-17							
Cereals	4.30	Fruit crops	5.8	Bio-fertilizers – AMC Powder	29.4	Amla Juice (in ltrs)	125
Millets	5.00	Plantation crops	96.2	Bio-fertilizers – AMC Liquid (1000 ltrs)	0.0	Amla Candy	0.76
Vegetables	9.80	Fodder	0	Bio-pest control formulations	49.9	Finger Millet Malt	0.60
Pulses	1.34	Vegetables	0	Micro-nutrient mixtures	214	Mushroom spawn	1.25
Fodder	2.4			Pheromone traps (1000 Nos.)	23.1	-	-
Vegetable seed kits (1000 Nos.)	1.85	-	-	-	-	-	-
2017-18							
Cereals	0	Fruit crops	12.0	Bio-fertilizers – AMC Powder	43.98	Amla Juice (in ltrs)	192
Millets	14.84	Plantation crops	67.4	Bio-fertilizers – AMC Liquid (1000 ltrs)	0.0	Amla Candy	1.60
Vegetables	3.31	Fodder	6.1	Bio-pest control formulations	23.02	Finger Millet Malt	0.75
Pulses	3.76	Vegetables	6.0	Micro-nutrient mixtures	304.0	Mushroom spawn	1.26
Oilseeds	0	-	-	Pheromone traps (1000 Nos.)	11.0	-	-
Fodder	2.61	-	-	-	-	-	-
Vegetable seed kits (1000 Nos.)	1.6	-	-	-	-	-	-
2018-19							
Cereals	0	Fruit crops	10.09	Bio-fertilizers – AMC Powder	29.23	Amla Juice (in ltrs)	359
Millets	2.11	Plantation crops	44.9	Bio-fertilizers – AMC Liquid (1000 ltrs)	3.62	Amla Candy	1.30
Vegetables	12.29	Fodder	2.7	Bio-pest control formulations	54.37	Finger Millet Malt	4.42
Pulses	4.49	Vegetables	2.2	Micro-nutrient mixtures	316.19	Mushroom spawn	6.88
Oilseeds	4.45	-	-	Pheromone traps (1000 Nos.)	11.31	-	-
Fodder	0.62	-	-	-	-	-	-
Vegetable seed kits (1000 Nos.)	2.4	-	-	-	-	-	-
Areca seed nuts (1000 Nos.)	48.0	-	-	-	-	-	-
2019-20							
Cereals	14.39	Fruit crops	13.7	Bio-fertilizers – AMC Powder	10.80	Amla Juice (in ltrs)	131
Millets	1.97	Plantation crops	24.2	Bio-fertilizers – AMC Liquid (1000 ltrs)	5.06	Amla Candy	0.44
Vegetables	3.74	Fodder	0.3	Bio-pest control formulations	68.28	Finger Millet Malt	0.80
Pulses	4.30	Vegetables	2.6	Micro-nutrient mixtures	279.58	Mushroom spawn	9.65

Oilseeds	0.30	-	-	Pheromone traps (1000 Nos.)	16.20	-	-
Fodder	0.28	-	-	-	-	-	-
Vegetable seed kits (1000 Nos.)	3.82	-	-	-	-	-	-
Areca seed nuts (1000 Nos.)	39.54	-	-	-	-	-	-

Outcome of Production and Supply/availability of technology products/ inputs to farmers

Name of the Technological Product/Inputs	**No. of farmers benefitted from the production and availability of technology products and inputs**	**Area (ha) covered due to sale of technological products/inputs (Approximately)**
Seeds		
Cereals	447	165
Millets	278	96.5
Vegetables	3486	649
Pulses	329	95.2
Oilseeds	237	90.4
Fodder	179	22
Vegetable seed kits	6091	6.8
Areca seed nuts	82	25
Total	**11129**	**1149.9**
Planting Materials		
Fruit crops	1726	645
Plantation crops	694	220
Fodder	28	2.2
Vegetables	118	12.5
Total	**2566**	**879.7**
Bio Products and other products		
Bio-fertilizers – AMC Powder	2386	840
Bio-fertilizers – AMC Liquid	1448	235
Bio-pest control formulations	6981	2140
Micro-nutrient formulations	16680	4860
Pheromone traps	4251	980
Amla Juice	694	-
Amla Candy	1231	-
Finger Millet Malt	1704	-
Mushroom spawn	424	-
Total	**35799**	**9055**
Grand Total	**49,494**	**11,085**


No. of Farmers benefited
Seeds
23%
Panting
Materials
5%
Bio-products
72%


Area spread (ha)
1149.9
879.7
9055
Seeds
Planting Materials
Bio-products

PART XIII - LINKAGES

13A. Functional linkage with different organizations

Name of organization	Nature of linkage
ICAR-CRIDA, Hyderabad	Technology demonstration Component of NICRA andConservation Agriculture projects
Zilla Panchayat, Tumakuru	Bhoosamruddhi Scheme
State Department of Horticulture	Trainings, FLDs, Joint Diagnostic Survey, Terrace Gardening,Exhibition, Advisories, Comprehensive Horticultural Development programmeetc.
State Department of Agriculture	Trainings, FLDs, Joint Diagnostic Survey, Krishi Abhiyana, ATMA SREP programme, Demonstration, DATC Training, Exhibition, Organic and Millet Melas, Krishi Melas, Farmers Days and Advisories.
Department of Animal Husbandry and Fisheries	Trainings, FMD Awareness Programme,Exhibition etc.,
Department of Sericulture	Trainings, Exhibition, Demonstration etc.,
Department of Women and Child Development	Trainings and Kitchen Gardening
BAIF NGO, Tiptur	Trainings and Technical Information
ORDER NGO, Tumakuru	Trainings, FLDs, Technical Information and FPOs support
AWARE NGO, Tumakuru	Trainings on Roof garden
APART NGO, Tumakuru	Organic Farming and Group Approach
MOTHER NGO, Tumakuru	Seed Village Concept, FPO support
UAS, Bengaluru	Trainings and FLDs by Technology Backstopping
UAS, Dharwad	Trainings and FLDs by Technology Backstopping
UHS, Bagalkote	Trainings and FLDs by Technology Backstopping
ICAR-NIANP, Bengaluru	Trainings and for Technology Backstopping
SKRDP, Tumakuru district	Trainings, FPOs
DHAN Foundation NGO	Trainings, Walkathon, Bhoosamruddi scheme programmes
AVISHKAR NGO, Tumakuru	Trainings, FPOs
IDF NGO, Tumakuru	Trainings, FPOs
Uttam Grama Seva Trust, Chennai	Training on Areca leaf plate making
Directorate of Oilseeds Development, Hyderabad	NMOOP project – Groundnut and Castor
Directorate of Pulses Development, Bhopal	NFSMproject- Red gram
National Horticulture Mission	Atomic absorption spectroscopy (AAS) and Mushroom Unit
NABARD,Tumakuru	AMC Unit – Production of Arka Microbial Consortium

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.)
Technology demonstration component of NICRA	January 2011	ICAR-CRIDA, Hyderabad	955000
National Food Security Mission (NFSM)	April 2020	DOP Kanpur	270000
National Mission on Oil Seed and Oil Palm (NMOOP)	April 2020	DOOR Hyderabad	560000

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**				
03	**Training programmes**				
04	**Demonstrations**				
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

13E. Nature of linkage with National Fisheries Development Board

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

13F. Details of linkage with RKVY

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

13G. Kisan Mobile Advisory Services

Month	No of Advisories	Message type (Text/Voice)	SMS/voice calls sent (No.)						Total SMS/Voice calls sent (No.)	Farmers benefitted (No.)
			Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
January	2	Text	2	0	0	0	0	0	2	1944
February	4	Text	4	0	0	0	0	0	4	1944
March	3	Text	2	0	0	1	0	0	3	1943
April	0	Text	0	0	0	0	0	0	0	0
May	5	Text	2	0	2	0	0	1	5	1943
June	9	Text	5	0	1	0	3	0	9	1943
July	9	Text	6	0	0	0	3	0	9	1943
August	0	Text	0	0	0	0	0	0	0	0
September	0	Text	0	0	0	0	0	0	0	0
October	1	Text	1	0	0	0	0	0	1	1942
November	0	Text	0	0	0	0	0	0	0	0
December	7	Text	6	0	0	1	0	0	7	1943
Total	**40**									**15545**

PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Organic Nutrition Garden	2019	0.1	ArkaSamrat	Tomato	45	850	1200	
				ArkaGarima	Cowpea	12			
				ArkaAnupama	Palak	12			
				ArkaAnand	Brinjal	10			
				ArkaSuguna	Amaranthus	14			
				ArkaSuvidha	French bean	5			
				Coriander leaves	Coriander	13			
				Pudina	Pudina	42			

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Fodder sorghum	15/6/2020	9/11/2020	0.20	Co(FS)-31	Seeds	0.20	5600	8000	
Ragi	22.07.2020	28.10.2020	0.40	KMR 630	Seeds	6.5	18000	26000	
Navane	12.8.2020	30.10.2020	0.20	DHFT 109-3	Seeds	1.02	2500	4080	
Pulses									
Oilseeds									
Fibers									
Vegetables									
Okra	14/06/2020	9/10/2020	0.2	A Anamika	Seeds	0.80	24500	32000	
Veg Seed kit (No.)	-	-	0	10 different vegetables	Seeds	395	32500	59250	
Spices & Plantation crops									
Areca nut		-	0	Hirehalli Tall	Seedlings	1720	40200	68800	
					Sprouts	30578	109000	214046	
Fruits									
Mango	-	-	0	Alphanso,	Grafts	3836	1,20,000	2,68,520	
Guava	-	-	0	AS, Pink flesh, L-49	Grafts	5522	1,20,000	3,86,540	
Lime	-	-	0	Balaji	Seedlings	5323	85,000	3,72,610	
Papaya Seedlings	-	-	0	Arkaprabhat	Seedlings	2936	15200	35232	
Tamarind Seedlings				PKM 1	Grafts	800	12000	56000	
Amla Grafts				NA 7	Grafts	1129	16935	79030	
Others seedlings	-	-	0	Rose apple, Fig, Ramphal, Custard apple Betel vine	Seedlings	3732	58,200	146550	
				Napier Grass	Cuttings	200		200	
				Guinea Grass	Cuttings	100		100	
Vegetables									
Drumstick	-	-	0	PKM-1	Seedlings	2051		30765	
Others (specify)									

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
	Neem Soap	3729	742540	969540	1243 Farmers benefitted and reduces the environment pollution
	Pongamia Soap	1408	186950	295680	591 Farmers benefitted
	Arka Borer Controller	418	42700	62700	64 Farmers benefitted
	Banana Special	94.60	10,87,900	15,17,520	
	Vegetable Special	18.23	2,09,645	2,99,040	
	Mango Special	66.25	7,59,180	10,84,530	
	Citrus Special	58.45	6,72,175	12,06,440	
	AMC powder	31.99	3,51,890	4,47,860	
	AMC liquid (100 **Ltrs.**)	42.0	8,61,000	10,49,322	
	Pheromone traps (**Nos.**)	10586	1,69,376	2,11,720	

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	
1	Sheep	Bannuru	Sheep	30kg	5500	9000	
2.	Bull	Hallikar	Cows/Bull	07 no.	90,580	1,41,000	

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			

14F. Database management

S.No	Database target	Database created

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

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

PART XV –SPECIAL PROGRAMMES

15.1 Paramparagath Krishi Vikas Yojana (PKVY)

Sl No.	Name of cluster village	Initial soil fertility status (Average of cluster village)				Facilities created for organic source of manure	Name of Crops cultivated	Variety	Organic inputs applied including bio-agents and botanicals treatment	Yield (q/ha)	Economics	
		Aval. N	Aval. P	Aval. K	OC %						Cost of cultivation (Rs/ha)	Net returns (Rs/ha)
1	1.											
	2.											
2	1.											
	2.											

15.2 District Agriculture Meteorological Unit (DAMU)

	Agro advisories			Farmers awareness programmes	
Sl No.	No of Agro advisories generated	No of farmers registered for agro advisories	No of farmers benefitted	No of programmes	No of farmers benefitted
1					
2					

15.3 Fertilizer awareness programme 2020

State	Name of KVK	Details of Activities/programmeOrganised	Number of Chief Guests	No. of Farmers attended program	Total participants

15.4Seed Hub

Crops	*Variety*	*Year of release*	*Production*				*Remarks*
			Target (q)	*Area (ha.)*	*Actual Production (q)*	*Category (FS/CS)*	

15.5 CFLD on Oilseeds:

Sl.No.	Crop	Varieties demonstrated and check	Allocated		Implemented	
			Area (ha)	Demos (No.)	Area (ha)	Demos (No.)
01	Groundnut	K-6	50	125	50	125

		TMV-2				
02.	Castor	DCH-177 Local	20	50	10	25
	Total		**70**	**175**	**60**	**150**

15.6 CFLDs on Pulses:

Sl.No.	Crop	Varieties demonstrated and check	Allocated		Implemented	
			Area (ha)	Demos (No.)	Area (ha)	Demos (No.)
01.	Red gram	BRG-5 Local	20	50	20	50
	Total		**20**	**50**	**20**	**50**

15.7 Krishi Kalyan Abhiyan

Type of Activity	Date(s) conducted	No. of farmers (General)			No. of farmers SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total

15.8 Micro-Irrigation

Type of Activity	Date(s) conducted	No. of farmers (General)			No. of farmers SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Trainings	20.2.2020, 16.9.2020 11.11.2020	60	10	70	9	3	12	-	-	-
Method demonstration	18.09.2020	10	5	15	6	2	8	8	02	10

15.9 Tribal Sub-Plan (TSP)

Farmer Training		Women Farmer Training		Rural Youths		Extension Personnel		OFT (No of Technologiess)	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. Person		On-farm trials	Front line demos	Mobile agro-advisory to farmers						

15.10 SCSP

Farmer Training		Women Farmer Training		Rural Youths		Extension Personnel		OFT (No of Technologiess)	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. Person		On-farm trials	Front line demos	Mobile agro-advisory to farmers						

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)	**30**	**30**
FLDs – Bio-fortified Crops (activity in no. of Unit)		
FLDs – Value addition(activity in no. of Unit/Enterprise)	**30**	**30**
FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)	**15**	**15**
Trainings	**3**	**60**
Extension Activities	**10**	**150**

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	Appliances	Crops	Resources	Fish
102	19	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N

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	Farmers (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	Tumakuru	Madhugiri	Rangapura Badavanahalli	32	91,228	Ragi, Maize, Redgram,Millets Groundnut Tomato, Brinjal, Chilli, Kakada, Mango, Banana, Arecanut, Dairy, Sheep rearing	Frontline Demonstrations, Trainings	-	-
2	Tumakuru	Koaratgere	Tanganahalli	50	102495	Paddy, Ragi, Maize, Redgram, Groundnut,Tomato, Brinjal, Chilli,French bean Kakada, Mango, Banana, Arecanut, Coconut, Dairy, Sheep rearing	Frontline Demonstrations, Trainings, NICRA Demonstrations	-	-
3	Tumakuru	Sira	Kumabarahalli	50	65056	Ragi, Maize, Redgram, Millets Groundnut Tomato, Brinjal, Chilli, Mango, Banana, Arecanut, Dairy, Sheep rearing	Frontline Demonstrations Trainings	-	-
4.	Tumakuru	Pavagada	Madavarayanapalya, Neralakunte	26	47514	Ragi, Maize, Redgram, Millets Groundnut, Cotton, Tomato, Brinjal, Chilli, Mango, Pomegranate, Banana, Arecanut, Dairy, Sheep rearing	Frontline Demonstrations Trainings	-	-
5.	Tumakuru	Tumakuru	Kodegehalli	20	41285	Ragi, Maize, Redgram, Millets Groundnut, Tomato, Brinjal, Chilli, Mango, Banana, Arecanut, Dairy, Sheep rearing	Frontline Demonstrations Trainings	-	-

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	State Bank of India	Hessaraghatta	041187	The Director, IIHR, Bengaluru	37578009241		SBIN0041187
With KVK							

16B. Utilization of KVK funds during the year 2019-20 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
	A. Recurring Contingencies			
1	**Pay & Allowances**	140.0	115.30	124.54
2	**Traveling allowances**	2.10	2.10	1.72
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	5.68	5.64	4.53
B	POL, repair of vehicles, tractor and equipments	3.23	3.23	2.23
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.00	1.00	0.76
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.25	0.25	0.15
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	3.15	3.15	1.46
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.40	0.40	0.30
G	Training of extension functionaries	0.25	0.25	0.08
H	Maintenance of buildings	3.50	3.50	0.40
I	Establishment of Soil, Plant & Water Testing Laboratory	0.25	0.25	0.24
J	Library	0.05	0.05	0.03
	TOTAL (A)			
	B. Non-Recurring Contingencies			
1	**Works**			
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)		161.10	136.40	137.20

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

Year	Opening balance as on 1st January	Income during the year	Expenditure during the year	Net balance in hand as on close of each year
April 2018 to March 2019	32,33,564	1,14,56,942	83,82,988	63,07,518
April 2019 to March 2020	63,07,518	79,05,495	1,07,65,845	34,47,168
April 2020 to January 2021	34,47,168	81,13,248	1,07,17,862	8,42,554

17. Details of HRD activities attended by KVK staff - NIL

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates

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.**

- Office opened for three days in a week during April 2020 onwards, after the completion of the first phase of nationwide lock down.
- KVK products sold for 179 farmers of worth of Rs. 4.05 lakhs during the COVID 19 lock down period.
- Agro advisories were provided for two months (April and May) to the farmers (approximately 1.5 lakhs farmer) through line departments.
- Message on Arogya Sethu App was widely shared in the farmers' group and messages.
- KVK Scientist attended farmer phone calls every day accounting to total 500 farmers got benefitted with regard to crop management, procurement of inputs, marketing related information.
- A Radio programme – Namma Halli Radio was launched during the period by Red cross society. we have given voice message on the fruit crop management practices during this phase. This message was broadcast to farmers in rural area.
- Farm activities like grafting and maintenance was taken care during the period, with limited staff
- Newspaper coverage on healthy habits like eating more number of vegetables and fruits were done, in order to improve the immunity power of citizens.
- Distribution of grocery-kit and seeds to SC farmers / farm women, Kadrenahalli, Tumakuru in collaboration with Avishkar NGO, Tumakuru
- KVK, along with department of Women and children and NRLM was organized a training programme on Spirulina Chikki supplement to develop immunity during 22.05.2020.30 SHG women members were participated.
- KVK, Hirehalli, linked Tomato farmers to Nagarabhavi Residents Bengaluru forum consists of 625 residents. 3.5 tones of Tomato were sold during COVID-19. More than 8 farmers from Tumakuru and Mandya district were facilitated to sell the produced during the period.
- In support of Suvarnamuki FPO, Badavanahalli, Madhugiri, many FLDs of new farm technologies, from ICAR-IIHR and GKVK, UAS, Bengaluru, were introduced. Chilli (Arka Kyathi), Onion (Arka Kalyan), China Aster (Arka Kamini), Brinjal (Arka Anamika) and Neem soap application are few among them. FPO members are involved in Value addition of Tamarind. A proper support is given to uplift their tamarind based products like Lollipops. Ideas related to FSSAI registration, proper packing and branding were shared. Arrangements to sell these products in KrishiMelas are also arranged periodically. Under SCSP project, honey bee boxes were provided to the eligible farmers of the FPO.
- ICAR-Indian Institute of Horticultural Research, Bengaluru, organized Honeybee Rearing & Training Programme at Kadaranahalli, Tumakuru Taluk and Badavanahalli, Madhugiri Taluk, Tumakuru Districtunder Tribal sub plan project on 30-07-2020.
- ICAR-Indian Institute of Horticultural Research, Bengaluru and KVK Hirehalli organized planting material distribution to farmers under SCSP programme at Pavagada in collaboration with Madakari FPO
- Supported Gramachetana FPO of D. Nagenahalli Koratagere taluk through providing honey bee colonies during COVID 19

- For Kasturi Rangappa Naika, DHAN, Nidagal and Madakari FPO's, handholding support was provided in running their business activities, apart from technical support. Farmers were covered under NFSM and NMOOP project by involving them for utilizing the improved varieties of Red gram (BRG-5) and Groundnut (K-6). Technological inputs of KVK like AMC and Micronutrient specials were provided for their FPO on discounted rate.

- A market linkage with Jack fruit processing firm (V.Nice Co.) was arranged for Gram Chetana FPO, D.Nagenahalli, Koratagere. Initially a meeting was arranged about minimal processing of Jack fruits. The Manager from the frim explained about the requirements and how to come out with the products. Later, they arranged cold storage boxes, which were sent to FPO. FPO members involved in minimal processing of fruits and transported them to the firm. Under SCSP project, drip irrigation lines were provided to the eligible farmers of this FPO.
- KVK Supported Hebbur Horticulture FPO, Horticulture FPO, Pavagada on crop management related activities, Marketing support to sell their products by linking with DDH (HOPCOMS) and procurement of machines for processing different products.
- KVK is instrumental in provision of machineries to FPOs :Swavalambi utpadakara samsthe, Madakari Souharda Co-operative Limited, Suvarnamukhi Souharda Co-operative Limited, Gramachetana.
- Use Of Social Media By Farmers Direct Marketing Of Avocado in Collaboration with Indian Institute of Horticultural Research (IIHR), Krishi Vigyan Kendra (KVK) Gonikoppal and Hirehalli.

Distribution of Planting Materials under SCSP Project at Pavagada in collaboration with Madhakar FPO

Handing over Beehives to farmers under SCSP