KRISHI VIGYAN KENDRA TUMAKURU-1

ANNUAL REPORT- 2022

(FOR THE PERIOD FROM 01 January, 2022 TO 31 December, 2022)

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE
ICAR-KRISHI VIGYAN KENDRA, TUMAKURU
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PART I – GENERALINFORMATION ABOUT THE KVK

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

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

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

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

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

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

1.4. Year of sanction: 2004

1.5. Staff position as on 31 December 2022

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M /F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Head/Senior Scientist	Dr. Govinda Gowda V.	Senior Scientist& Head	M	Agril. Extn.	M.Sc (Agri.), Ph.D.	144200-218200	182700	15.12.2021	Permanent	OBC
2	Scientist/SMS	Dr. Shivappa Nayaka	Scientist	M	Animal Science	M.V.Sc. (Poultry Science)	57,700-1,82,400	68800	24-10-2013	Permanent	ST
3	Scientist/SMS	Mr. Manoj H	Scientist	M	Plant Protection	M.Sc (Agri.)	57,700-1,82,400	57700	14-07-2022	Permanent	SC
3	Scientist/SMS	Dr. Tasmiya kowsar	Scientist	F	Agronomy	M.Sc. (Agri.) Ph.D.	57,700-1,82,400	57700	01-08-2022	Permanent	Others
4	Scientist/SMS	Dr. Darshan M E	Scientist	M	Agril. Extn	M.Sc (Agri. Extn.), Ph.D.	-	40000	26-10-2021	Temporary	OBC
5	Scientist/SMS	Dr. Nityashree K	Scientist	F	Home Science	M.Sc. (Agri.), Ph.D.	-	40000	17-11-2022	Temporary	OBC
6	Scientist/SMS	Vacant	Scientist	-	Horticulture	-	-	-	-	-	-
7	Scientist/SMS	Vacant	Scientist	-	Soil Science	-	-	-	-	-	-
8	Programme Assistant (Lab Tech.)	Vacant	Programme Assistant (Lab Tech.)	F	-	-	-	-	-	-	-
9	Programme Assistant (Computer)	Mr. Pradeep Kumar. H	STO (Computer)	M	-	BE (CSE), MCA	56100-177500	57800	22-01-2011	Permanent	SC
10	Programme Assistant/ Farm Manager	Dr. Sathish H.S.	Farm Manager	M	-	M.Sc (Agri. Extn.), Ph.D.	35400-112400	35400	15-07-2022	Permanent	Others
11	Assistant	Mr. Santhosh Kumar M.P.	-	M	-	M Com	-	26400 consolidated	01-06-2018	Temporary	Others
12	Jr. Stenographer	Ms. Shama Naz	-	F	-	B.Sc. (Agri. Biotechnology)	-	24008consolidated	25-08-2020	Temporary	Others
13	Driver - 1	Mr. B. Mallikarjunaiah	-	M	-	SSLC	27650-52650	36950	18-02-2010	Permanent	Others
14	Driver - 2	Mr. Harish B N	-	M	-	PUC	-	19140consolidated	09-06-2017	Temporary	Others
15	SS-1	Mr. L. Manjaiah	-	M	-	SSLC	18600-32600	24050	20-10-2008	Permanent	SC

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)
16	SS-2	Mr. Rudresha	-	M	-	PUC	-	15840 consolidated	03-03-2018	Temporary	Others
17		Mr. Sanjay		M		PUC		12000	04-02-2019	Temporary	Others

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

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

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR UAS	22.02.2012	-	55,00,000 25,00,000	-	-	-
2.	Farmers Hostel	ICAR	22.12.2012	550	53,00,000	-	-	-
3.	Staff Quarters	Nill						
4.	Demonstration Units					-	-	-
	Dairy unit	UAS	2009	-	-	-	-	-
	Sheep unit	UAS	2009	-	-	-	-	-
	Poly house	NHM	2011	-	-	-	-	-
	Green House	NHM	2011	-	-	-	-	-

	Vermi Compost Unit	NHM	2015	-	-	-	-	-
	Bio Digester	ICAR	2015	-	-	-	-	-
	IFS Demonstration unit	ICAR	2015	-	-	-	-	-
	Krishi Bhagya Model	GOK	2016	-	-	-	-	-
	Millet Processing unit	UAS	2019	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
JeepMahindra BOLERO	2017	666162	158000	Working
Tractor Massey Ferguson	2002	3,80,000	5001.2	Working
BikeTVS Star City (ICAR, 79 / III)	2006	40,000	69050	Working
Honda Activa (ICAR, 7 / IV)	2009	50,000	53110	Working

C) Lab equipment & AV aids

Name of Equipments	Year of purchase	Quantity (No.)	Cost (Rs.)	Present status
Photo Copier (Toshiba)	30-03-2009	1	77,954	Not working
Generator (10 KV)	01-04-2002	1	86,100	Not working
Over Head Projector (OHP)	28-05-2002	1	15,976	Good
Camera Pentax –SLR	31-07-2002	1	25,000	Not working
Public Address System	31-07-2002	1	21,500	Good
Kodak Ektalite Slide Projector with slide tray	05-04-2003	1	47,125	Not working
Philips TV 21 inches + VGuard Stabilizer	20-05-2003	1	12,513 + 882	Not working
Philips DVD Player 625 K	20-05-2003	1	8,276	Not working
LYNX Stevenson Screen Single	04-07-2003	1	6,000	Good
Nova easy carry display system (1 set)	06-01-2003	1	14,000	Good
Nova cardinal writing board (3’ x 4’)	05-04-2003	1	5,742	Good
HP Deskjet 3745 Printer	12-03-2005	1	3,400	Good
HP Scanjet 2400 Scanner	12-03-2005	1	4,400	Not working

Thoshiba Projector	14-06-2007	1	60,106	Good
Panasonic fax machine	21-01-2011	1	15200	Good
HP Lasejet 1020plus printer	28-02-2012	1	7,350	Good
Computer (Intel Pentium)	21-01-2013	1	14000	Good
CANON Laser printer	21-01-2013	1	5200	Good
Digital Sony camera MDSEW 320	21-01-2013	1	25000	Not working
Acer desktop computer	28-02-2013	1	32,150	Good
DSC coolpix S 6300 NIKON digital camera	07-03-2013	1	10,490	Not working
NIKON coolpix P530 camera	13-03-2013	1	19,991	Not working
Epson multifunction printer	Feb.2016	1	13,999	Good
Seagate external hard drive	Feb.2016	1	6,500	Good
Xerox machine	Mar.2016	1	99,000	Good
Kent water guard	Nov.2016	1	16,000	Not working
Digital electrical conductivity meter	11-03-2017	1	15,845	Good
UPS system	Jan.2017	1	81,994	Good
Trolley Speakers	March 2017	1	18,000	Good
Projector screen	Jan. 2017	1	5,500	Good
Computers	Feb.2017	1	80,971	Good
Interactive Board	Mar.2017	1	30,595	Good
CCTV camera	Mar.2017	10	59,513	Good
Mini Laptop	March 2017	1	14,028	Good
Tablet	March 2017	1	8,177	Good
Office Chairs	Feb.2017	10	59,991	Good
AC unit	March 2017	1	27,995	Good
Kiosk Tent	March 2017	1	10,000	Good
Neelkamal Chairs	March 2017	20	10,611	Good
Projector screen	Jan.2017	1	5,500	Good
FTTH connection	March 2019	1	12,000	Good
Epson L655 printer	02-11-2019	1	29568	Good
Dell incpim intel core	07-11-2019	1	50600	Good
4TB segate external hard disc	07-11-2019	1	11800	Good
Electronic balance	13-11-2019	1	46080	Good
Digital conductivity meter	18-12-2021	1	23600	Good
Aluminium sliding window	13-12-2021	1	16042	Good
pH meter electrode system	21-12-2021	1	33276	Good
Dell laptop intercore	06-03-2018	1	49000	Good

D) Farm equipment and implements

Name of the equipment/implement	Year of purchase	Quantity (No.)	Cost (Rs.)	Present status
Trolley Stand	05/04/2003	1	7,655	Good
Bee hive boxes (12 nos.)	06/01/2003	12	7,800	Good
Honda weed cutter	17/02/2009	1	30,000	Good
Chaff cutter machine	Feb.2016	1	25,300	Good
Hydrophonic unit	March 2017	1	70,000	Good
power sprayer	12/02/2021	1	20,000	Good
Chainsaw petrol engine	12/02/2021	1	19,500	Good
Rigid cultivator	12/02/2021	1	34,500	Good
7 HP power weeder	27/03/2021	1	99,000	Good
Weed cutter	04/02/2022	1	29,900	Good
11 disc harrow	04/02/2022	1	55,357	Good
3 HP chaff cutter	04/02/2022	1	33,839	Good
Earth auger	24/02/2022	1	25,422	Good
Hedge Trimmer	24/02/2022	1	21186	Good
Harvesting pole	24/02/2022	1	27000	Good
Milking machine	24/02/2022	1	40,000	Good
carbon fiber pole	24/02/2022	1	49,900	Good
Venture spray pole premium SVPL	30/07/2022	1	12,000	Good

1.8. Details of SAC meeting organized

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
05.03.2022	64	Conduct demonstrations and Training programme for farmers on management of Rugose white fly in coconut plantation.	conducted training programme and demonstration through FLD, OFT and EDP	-
		Conduct demonstrations and Training programme on tree mulberry in collaboration with Department of Sericulture		
		Conduct impact study on various extension activities conducted at Adopted Village		
		Establish IFS model at KVK farm in collaboration and line department and provide technical guidance to farmers to adopt the same in their field		
		Conduct training/awareness programmes on crop diversification in Agriculture		
		Conduct more training programmes on IPM Practices in field and horticultural crops		
		Adopt FPO and provide technical support and also value addition guidance for effective functioning		
		Conduct training programmes on effective nutrient management in farmers field		

		Conduct skill based training programme on grafting techniques in Horticultural crops		
		Conduct Training programmes on agro-forestry		
		Make necessary arrangements for availability of bio-fertilizer and bio-pesticides in KVK		
		Conduct Training programmes on usage of bio fertilizer in pomegranate.		
		Conduct demonstrations on pruning techniques in Jasmine		
		Conduct Training cum demonstrations value addition on banana and Tamarind crops		
		Create awareness programme on Weather based agro advisories.		
		Create awareness programme for farmers on importance of soil health cards and its benefits		
		Conduct skill based training programme on harvesting of coconut, arecanut and tamarind through mechanization		
		Organize awareness programmes about organic farming/Natural farming.		
		Continue the compost preparation from Arecanut trash.		
		Conduct Mulberry demonstration in both KVK farm and farmers field		
		Establish nutrigardens based on deficiency of particular nutrients in adopted villages, ensuring availability of specific vegetables to combat the nutrients deficiencies		
		Popularise the tamarind processing, post harvesting and value addition activities		
		Conduct the demonstration of Koranda fruit in scientific way		
		Increase the production and selling of coconut saplings.		
		Demonstration of newly released varieties and technologies from UASB at KVK.		
		Geo tagging of Photographs /video recordings of FLD and OFT's conducted by the KVK's		
		During Scientists visits to farm trails fields should record their opinion and details in the register		
		Popularize the siri survana technology through demonstration		
		Present FLD and OFT photographs on different stages of both farmers field and demo field.		
		Present the on-going FLD and OFT details(stages)in SAC meeting		
		Record and Present data/results of FLD and OFT in consequent SAC meeting		
		Include sericulture ,animal husbandry and fishery in identified thrust areas.		
		Record and present number of entrepreneurs emerged after completion of DAESI Programme		
		Conduct demonstration on natural and organic farming in KVK farm		
		Popularize and conduct training programme on importance of sexed semen in HF/Jersy in collaboration with Dept. of Animal Husbandry		
		Conduct demonstration on Genetically improved and Farmed Tilapia (GIFT) in KVK in collaboration with Dept. of fishers and popularize among farmers		

PART II - DETAILS OF DISTRICT

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

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

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

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

Sl. No.	Agro ecological situation	Characteristics
-	-	-

2.3 Soil type/s

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

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

Sl. No	Crops	Area (ha)	Production (tons)	Productivity (q/ha)
1	Paddy	3,917	25,829	38
2	Finger millet	1,16,423	25,15,025	15.5
3	Minor millets	846	4,128	8.5
4	Red gram	10,588	4,128	12
5	Horse gram	51,939	5,180	5.5
6	Black gram	308	193	3.2
7	Green gram	8,029	4,348	5.5
8	Cow pea	3,130	1,686	6.5
9	Field bean	8,029	4,348	5.5
10	Groundnut	56,353	42,567	6.5
11	Sesamum	122	119	3.5
12	Castor	1,838	783	8.5
13	Coconut	174376	12548 (Lakhs)	65 (No/palm)
14	Arecanut	70,493	88,498 (Lakh tons)	1.26 ton
15	Mango	16,987	139711 (MT)	8.22 ton
16	Banana	4,061.4	11,953.1 (MT)	29.43 ton
17	Tomato	4,157	2,45,364	53,000
18	Brinjal	354	11,371	121.2
19	Chilli	874	24,765	29,300
20	Tamarind	2,556	15,159	60
21	Pomegranate	3,330	33,234 (MT)	9.98 ton

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

2.5. Weather data

Tumakuru district Rainfall data

Month	Rainfall (mm)
January 2022	0.0
February 2022	0.0
March 2022	17.0
April 2022	51.0
May 2022	214.0
June 2022	149.0
July 2022	158.7
August 2022	294.0
September 2022	141.9
October 2022	224.1
November 2022	22.9
December 2022	58.0
	1330.6

*** Source:** DAMU, KVK, Konehalli

KVK Rainfall data

Month	Rainfall (mm)
January 2022	0.0
February 2022	0.0
March 2022	20.0
April 2022	51.5
May 2022	214.5
June 2022	123.5
July 2022	147.0
August 2022	268.0
September 2022	110.5
October 2022	86.5
November 2022	11.5
December 2022	77.5
	1110.0

*** Source:** DAMU, KVK, Konehalli

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

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

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

2.7 District profile maintained in the KVK has been **Updated** for 2022: Yes

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Tiptur	Nonavinakere	Byrapura Chikkabidare Gopalanapalya Gyaraghatta Gowdanakatte Kallegowdanapalya Kannaghatta Karadalu Karikere Kibbanhalli Koppa Kunduru Mundunathapura Nagalehalli Nagaraghatta Nagathihalli Paragondanahalli Anagondanahalli Sattaramanahalli T L Palya Thimalapura vitalapura Tadasuru Patarehalli Chikkahonnavalli	3 year	Millets Redgram Castor Ragi, Chilli, IFS Chilli Cattle Mushroom andAmla products and marketing	• Low soil fertility, poor nutrient management practices and low yield • Incidence of pod borer menace • Use of local and old varieties, yield decline due to pest semi looper Neck and finger blast, • Lack of knowledge on value addition • Low productivity • Low income to run family • Less profit and high incidence of Mastitis • Low Income generating activities for SHG's • Less awareness on Processing and value addition of agriculture and horticulture produce	Enhancing crop productivity through soil, pest and disease management. Improved animal husbandry practices Income generating activities for SHG's Processing and value addition of agriculture and horticulture produce
2	Turvekere	Dhabeghatta	M V Halli Lakkasandra Kurubarahalli	3 year	Bengalgram Tomato Banana Arecanut	Inefficient use of paddy fallows Use of local and old varieties, improper control measures for pod borer Low yield, Lack of HYVs,	Introduction of high yielding varieties Nutrient and water management

						Improper nutrient management Less productivity, incidence of pest and diseases Improper plant protection measures for wilt including use of tolerant variety Severe nut splitting and yield loss due to deficiency of boron	
3	C.N. Halli	Shettikere	Godekere Bagganahalli Banadevarahatti Bagganahalli Ranganahalli Ranganakere Somanahalli Kannaghatta Ranganakere Guruvapura Ganadalu Belavadi Mathighatta Madapura Mathighatta Madapura Mathighatta Sreyadanahalli Handanakere Kandikere Kodipalya Yelanadu	3 year	Groundnut Millet crops Coconut Vegetable	Low soil fertility, high weed infestation and lower income Low yield potential of existing ruling varieties Lack of awareness on branding and labeling of millet products Severe incidence of Basal stem rot leading to death of palm Inefficient use of space, and lower income from mono cropping	Enhancing productivity through introduction of high yielding variety and pest management and other improved packages Processing and value addition of agriculture and horticulture produce
4	Gubbi	Nittur	Sagaranahalli Kodinadevanahalli Tyagaturu Bommanahalli Kodinagenahalli N Rampura Samudrakote Muganahunase Paragondanahalli K D Halli	3 year	Coconut Arecanut Vegetable Flower crops Sheep farming Poultry	Mono-cropping, no appropriate use of space and cropping in plantation crops Severe incidence of Red palm weevil and Black headed caterpillar leading to yield decline Inefficient use of space , low soil fertility, heavy weed growth	Enhancing productivity Sustainable income generation through animal husbandry activities

			Belavatta			Infestation of fluke worm (Fasciola hepatica), loss of body condition, jowl oedema, pipe stem liver, loss of carcass quality Loss of body condition, improper weight gain, decreased egg production, increase in number of culls, clubbed foot	
5	Kunigal	Hippadi	Doddamadure Varevanagodanadaddi Doddakoppalu	3 years	Coconut Vegetable Paddy Finger millet	Low soil fertility, high weed infestation and lower income Low yield potential of existing crop varieties Severe incidence of Basal stem rot leading to death of palm Inefficient use of space, and lower income from mono cropping	Enhancing productivity through introduction of Integrated cop management approach

2.9 Priority thrust areas

S. No	Thrust areas
1	Integrated water management with special emphasis on micro - irrigation
2	Integrated Nutrient Management in Agri. and Horticultural crops
3	Introduction of newer varieties
4	Integrated Pest and Disease Management
5	Integrated farming system with special emphasis to livestock
6	Value addition & market linkage through CBA's / FPO's

PART III - TECHNICAL ACHIEVEMENTS

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
3	3	11	11	27	27	310	310

Training (Farmers/farm women)				Training (Rural youth)			
3				4			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
86	92	2950	3649	4	4	125	136

Training (Extension personnel)				Training (sponsored)			
5				6			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
4	4	140	148	16	22	770	865

Training (Vocational)				Extension Programmes			
7				8			
Courses (No.)		Participants (No.)		Programmes (No.)		Participants (No.)	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
-	-	-	-	8592	9592	46230	54326

Seed Production (Q)		Planting material (Nos.)	
9		10	
Target	Achievement	Target	Achievement
60	100	3900	4333

Livestock, poultry strains and fingerlings (No./liters)		Bio-products (Kg)	
11		12	
Target	Achievement	Target	Achievement
3250 liters	3670.4 liters	-	-
Soil, water, plant and manure analysis (including mobile kits)		Mobile agro advisories provided	
13		14	
Samples (No.)	Farmers (No.)	Messages including text, voice, what's app (No.)	Farmers (No.)

Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
480	493	450	465	295	367	20500	22000

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/ critical inputs	
	2021-22													
1	Varietal Evaluation	Pomegranate	Low yield, incidence of Pest and Diseases Imbalanced nutrient management	Assessment of bio formulations for improving Quality and plant health management of Pomegranate	-	1	-	-	1	-	-	-	Aspergillus niger Trichoderma VAM Pseudomonas Arka Actino Bacterial consortia IFFCO Bio fertilizer	10 kg 10 kg 12.5 kg 10kg 25 kg 15 lit
2	Integrated Crop Management	Mango	Improper canopy management , Alternate bearing, poor nutrient management, fruit dropping, Fruit fly & Powdery mildew menace	-	Integrated Crop Management in Mango (Var. Alphanso)	2	1	-	1	-	-	-	AMC(liquid)	20lt
3	Integrated nutrient management	Coconut	Improper nutrient and moisture conservation practices, mono cropping and low returns	-	Integrated nutrient management in Coconut	2	-	-	1	30kg	-	-	Trichderma Pseudomonas Neem cake	20kg 20kg 600kg
4	Inter-cropping	Hebbal Avare	Improper utilization of inter-space and weed menace in younger arecanut gardens	-	Inter-cropping of Hebbal Avare-4 (HA-4) in younger arecanut gardens	2	-	-	1	6 kg	-	-	Vegetable special Rhizobium Neem oil, neem cake	2 kg 1 kg 250 ml 60 kg
5	INM	Arecanut	Poor soil fertility status, nut spitting and dropping, improper nutrient management, incidence of pest and disease and low returns	-	Enhancement of productivity in Arecanut through nutrient mgt	3	-	-	3	Cowpea: 5kg	-	-	Boron MOP Neem cake Trichoderma	8 kg 70 kg 130 kg 2kg
6	INM	Banana	Improper sucker management, poor nutrient management and their dosage, pest and disease management	-	Integrated Nutrient Management in Banana (Var. Puttabale)	2	-	-	1	-	-	-	Banana special Neem cake AMC SOP Chloropyriphos Propyconozal	6 kg 300 5 kg 3 kg 1 Litre 500 ml
7	IPM	coconut	Improper Management of Rugose Spiraling whitefly	-	Management of Rugose Spiraling whitefly in coconut	1	-	-	-	-	-	-	Yellow sticky traps, Neem oil EPF- Imidacloprid	1 100 ml -
8	EDP	Coconut	Lack of knowledge on value added products of coconut	-	EDP- coconut value added products, branding and market linkage	1	-	-	-	-	-	-	Labels and packaging Sealing machine	500 No 1 No
9	EDP	Tamarind	Lack of knowledge on value added products of Tamarind	-	Tamarind value added products, branding and processing	1	-	-	-	-	-	-	Tamarind slab Packaging materials Labels Weighing balance Sealing machine Miscellaneous	6 500 500 1 1 Other ingredients
10	Nutrition garden	Nutrition garden	Micronutrient deficiencies also referred to as 'Hidden Hunger' affects the health, learning ability as well as productivity owing to high rates of illness and disability contributing to malnutrition, underdevelopment and poverty.	-	Nutrition garden to farm families	7			4	-	-	-	vegetable seeds kit Medicinal plants flower seedlings vegetable seedlings Neem cake	30 150 300

			Nutri garden is a multidimensional effort to reduce malnutrition.										vermicompost	600 90kg 150kg
	2022-23													
11	Varietal Evaluation	Chilli	Low yielding hybrids, poor quality, leaf curling and powdery mildew disease incidence	Assessment of green chilli hybrid for higher productivity	-	3	-	-	1	-	Ulka hybrid Arka Saanvi Arka Gagana Hy-80 : 250 each	-	Trichoderma	4 kg
12	Varietal Evaluation	Pomegranate	Low yield, incidence of Pest and Diseases Imbalanced nutrient management	Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate	-	3	-	-	2	-	-	-	Aspergillus niger Trichoderma VAM Pseudomonas Arka Actino Bacterial consortia IFFCO Bio fertilizer	10 kg 10 kg 12.5 kg 10kg 25 kg 15 lit
13	Introduction variety	Finger millet	Farmers getting low yield, due to frequent dry spells, incidence of blast (15%).	-	Demonstration of Finger Millet Variety KMR - 630	2	-	-	2	5 kg	-	-	ZnSO4, Borax Azosprillum	5 4 1
14	Introduction variety	Brinjal	Incidence of wilt & improper nutrient management in brinjal reduces yield upto 30%. Arka Actino plus recommended for the better nutrient uptake and imparting wilt tolerance.	-	Demonstration of Arka Actino Plus on growth and yield of Brinjal	3	-	-	2	-	-	-	ACT Vegetable special Pheromone traps, Neem oil, neem cake and pp chemicals-(coragen & Tilt)	22 kg 2 kg 5 / demo 250 ml 60 kg -
15	Inter-cropping	Hebbal Avare	Improper utilization of inter-space and weed menace is a problem in younger arecanut gardens. HA-4 is bush type and photo insensitive & suitable for intercropping.	-	Inter-cropping of Hebbal Avare-4 (HA-4) in Younger Arecanut Gardens	2	-	-	1	6 kg	-	-	Vegetable special Rhizobium Neem oil, neem cake	2 kg 1 kg 250 ml 60 kg
16	Integrated Crop Management	Tomato	Farmers grow Low yielding variety and facing Poor nutrient management, blight and wilt incidence (20%). It is necessary to demonstrate high yielding with multiple disease resistant variety.	-	Integrated Crop Management in Tomato	2	-	-	1	Arka Abedha-30g	-	-	Vegetable Special Neem cake AMC/Trichoderma Indoxicarb	5 kg 50 kg 1 kg 100 ml
17	Integrated Crop Management	Chilli	Growing of low yielding varieties & improper nutrient management leads to flower drops(10%), murda complex (20%) & powdery mildew (15%) incidence. KBCH-1 promising hybrid with high yielding and tolerance to powdery mildew	-	Integrated Crop Management in Chilli	2	-	-	1	Arka Haritha – 50g	-	-	Planofix AMC Vegetable Special Neem cake Carbondizm	300 ml 1 kg 6 kg 50 500 g
18	INM	Arecanut	Farmers facing the problems of nut spitting and dropping due to inadequate nutrient management. It is necessary to demonstrate application of Boron and MOP as a nutrient management and cowpea as a green manure crop to enhance higher yield.	-	Enhancement of Productivity through Nutrient Management in Arecanut	3	-	-	1	Cowpea: 5kg	-	-	Boron MOP Neem cake Trichoderma	8 kg 70 kg 130 kg 2kg
19	ICM	Mango	Farmers facing the problems of Improper canopy management, Alternate bearing, poor nutrient management, fruit dropping, Fruit fly & Powdery mildew incidence (18%).	-	Enhancement of Productivity through ICM in Mango (Var. Alphanso)	3	-	-	1	-	-	-	Paclobutrazol Mango special NAA Fruit Fly Traps Carbendazim Imidachloprid	100 ml 5 kg 100 ml 8 N0. 500 kg 200 ml
20	ICM	Banana	Improper sucker management, poor nutrient management and inadequate pest and disease management leads to low yield in banana.	-	Integrated Crop Management in Banana (Var. Puttabale)	2	-	-	1	-	-	-	Banana special Neem cake AMC SOP Chloropyriphos Propyconozal	6 kg 300 5 kg 3 kg 1 Litre 500 ml
21	Introduction variety	Black Gram	Black gram an important short duration pulse crop. Due to Low yield, high incidence of YMV (65%), Powdery	-	Demonstration of Yellow Mosaic Virus Resistant	2	-	-	1	5 kg	-	-	Pulse magic Rhizobium Carbendazim	2 1 500 g

			mildew (30%). It is essential to demonstrate YMV resistant and high yielding variety to solve present problem		Black Gram Variety LBG-791									
22	IPM	coconut	Rugose Spiraling whitefly is becoming severe in coconut CPCRI & NBAIR developed IPM technology to manage this pest.	-	Management of Rugose Spiraling whitefly in coconut	2	-	-	2	-	-	-	Yellow sticky traps Neem oil Isaria fungus Imidacloprid	10 3 L 3 L 250 ml
23	IPDM	Arecanut	Severe incidence of spindle bug and bud rot (60 %). Farmers are not taking appropriate measures to manage this complex problem	-	Management of Spindle Bug and Bud Rot in Younger Arecanut Garden	2	-	-	2	-	-	-	Thiomethaxam COC Metalaxyl + mancozeb	3kg 2kg 2kg
24	IPDM	Ginger	Rhizome rot complex caused by Pythium aphanidermatum and Ralstonia solanacearum causing yield loss upto 40%. In order to effectively manage IDM package developed by IISR and UAS B needs to be demonstrated in farmers field.	-	Management of Rhizome rot complex in Ginger	3	-	-	2	-	-	-	Trichoderma Pseudomonas Neem cake Ginger special COC streptocycline	5kg 5kg 100 2kg 2kg 250 g
25	Value addition	Foxtail Millet	Farmers grow local variety of foxtail millet and also not involved in processing and value addition. DHFT 109-3 released by UASD has a good yield potential over local variety.	-	Demonstration of Foxtail Millet Variety DHFT 109-3 and it's Value Addition	2	-	-	1	5 kg	-	-	Packaging materials Labels	100 No 100 No
26	IDM	Dairy Cattle	Anemia is a disease (reduction in RBC Number) of bovines, associated with lack of appetite & weakness, unable to walk. It accounts around 25% of overall cattle population.	-	Integrated Approaches to Combat Anaemia in Dairy Cattle	1	-	-	1	-	-	-	Syp Fentas plus Syrup Ferstron Inj. Imferon Inj. Tonophosphan Inj. Neuroxin	1 1 1 1 1
27	IDM	Dairy Cattle	Even after managing anoestrus, some may tend to be in true anoestrus due to genetic and hormonal imbalance. About 20% of dairy animals suffer from this disease	-	Integrated Approaches to Combat Anestrus in Dairy Cattle	1	-	-	1	-	-	-	Syp Zyclose(Dewormer) Nutricel(Mineral mixture) Inj Gynarich (GnRH), Inj Pragma(Prostaglandin Inj onophosphan, Inj AD3	1 each
28	Fodder development	Fodder var. COFS 31	Most of the farmers are practicing monoculture in coconut orchard Using CoFS 31 as intercrop will help farmers as it is high yielding and non seed shattering type and multicut.	-	Demonstration of COFS-31 Fodder Crop as Inter Crop in Coconut Garden	1	-	-	2	2 kg	-	-	Bio fertilizer	1 kg
29	Value Addition	Banana	Banana fruit is highly perishable and has got a short shelf life post harvesting. About 20-30 per cent wasted every season. Banana flour is prepared from green bananas, which has high starch content. It can also be blended with other cereal flour.	-	Processing and Value Addition of Banana as IGA	2	-	-	1	-	-	-	Packaging materials Labels Weighing balance Sealing machine Grinder	300 No 300 No 5000 4000 15000
30	Nutrition garden	Nutrition garden	Micronutrient deficiencies also referred to as 'Hidden Hunger' affects the health, learning ability as well as productivity owing to high rates of illness and disability contributing to malnutrition, underdevelopment and poverty. Nutri garden is a multidimensional effort to reduce malnutrition.	-	Nutrition garden to farm families	2	-	-	1	-	-	-	vegetable seeds kit Medicinal plants flower seedlings vegetable seedlings Neem cake vermicompost	30 150 300 600 90kg 150kg

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
	2021-22						
1	Assessment of bio formulations for improving Quality and plant health management of Pomegranate	IFFCO New Delhi, IIHR Bengaluru, IFFCO New Delhi	Pomegranate	1	-	4	-
2	Integrated Crop Management in Mango (Var. Alphanso)	IIHR (B)	Mango	-	1	3	-
3	Integrated nutrient management in Coconut	UAS (B)	Coconut	-	1	6	-

4	Inter-cropping of Hebbal Avare-4 (HA-4) in younger arecanut gardens	UAS (B)	Hebbal Avare	-	1	2	-
5	Enhancement of productivity in Arecanut through nutrient mgt	CPCRI, Kasaragod	Arecanut	-	1	3	-
6	Integrated Nutrient Management in Banana (Var. Puttabale)	IIHR (B)	Banana	-	1	2	-
7	Management of Rugose Spiraling whitefly in coconut	CPCRI & NBAIR	coconut	-	1	2	-
8	EDP- coconut value added products, branding and market linkage	TNAU, Coimbatore	Coconut : Value Addition	-	1	3	-
9	Tamarind value added products, branding and processing	UAS (B)	Tamarind	-	1	5	-
10	Nutrition garden to farm families	UAS (B)	Nutrition garden	-	1	7	-
	2022-23						
11	Assessment of green chilli hybrid for higher productivity	IIHR(B) & UAS(B)	Chilli	1	-	3	-
12	Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate	IFFCO New Delhi, IIHR Bengaluru, IFFCO New Delhi	Pomegranate	1	-	3	2
13	Demonstration of Finger Millet Variety KMR - 630	UAS (B)	Finger millet	-	1	2	2
14	Demonstration of Arka Actino Plus on growth and yield of Brinjal	IIHR (B)	Brinjal	-	1	3	2
15	Inter-cropping of Hebbal Avare-4 (HA-4) in Younger Arecanut Gardens	UAS (B)	Hebbal Avare	-	1	2	1
16	Integrated Crop Management in Tomato	IIHR (B)	Tomato	-	1	2	1
17	Integrated Crop Management in Chilli	IIHR (B)	Chilli	-	1	2	1
18	Enhancement of Productivity through Nutrient Management in Arecanut	CPCRI, Kasaragod	Arecanut	-	1	3	1
19	Enhancement of Productivity through ICM in Mango (Var. Alphanso)	IIHR (B)	Mango	-	1	3	1
20	Integrated Crop Management in Banana (Var. Puttabale)	IIHR (B)	Banana	-	1	2	1
21	Demonstration of Yellow Mosaic Virus Resistant Black Gram Variety LBG-791	UAS (B)	Black Gram	-	1	2	1
22	Management of Rugose Spiraling whitefly in coconut	CPCRI & NBAIR	coconut	-	1	2	2
23	Management of Spindle Bug and Bud Rot in Younger Arecanut Garden	CPCRI Kasaragod	Arecanut	-	1	2	2
24	Management of Rhizome rot complex in Ginger	UAS (B)	Ginger	-	1	3	2
25	Demonstration of Foxtail Millet Variety DHFT 109-3 and it's Value Addition	UAS (B)	Foxtail Millet	-	1	2	1
26	Integrated Approaches to Combat Anaemia in Dairy Cattle	NDRI	Dairy Cattle	-	1	1	1
27	Integrated Approaches to Combat Anestrus in Dairy Cattle	NDRI	Dairy Cattle	-	1	1	1
28	Demonstration of COFS-31 Fodder Crop as Inter Crop in Coconut Garden	Namakal	Fodder Crop	-	1	1	2
29	Processing and Value Addition of Banana as IGA	ICAR-NRCB, Trichy	Banana	-	1	2	1
30	Nutrition garden to farm families	UAS (B)	Nutrition garden	-	1	2	1

3.B2 contd..

Sl. No.	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
	2021-22															
1	2	1	1	-	-	-	-	-	20	15	10	20	-	-	-	-
2	-	-	-	-	10	2	2	1	54	16	31	8	12	8	14	10
3	-	-	-	-	5	-	-	-	30	15	10	5	-	-	-	-
4	-	-	-	-	5	-	-	-	-	30	-	-	-	-	-	-

5	-	-	-	-	5	3	2	-	20	30	15	10	-	-	-	-
6	-	-	-	-	2	1	1	1	28	15	32	11	-	-	-	-
7	-	-	-	-	2	1	1	1	29	15	32	11	-	-	-	-
8	-	-	-	-	5	30	4	1	28	15	32	11	-	-	-	-
9	-	-	-	-	5	15	-	-	28	15	2	11	-	-	-	-
10	-	-	-	-	10	20	-	-	20	30	1	18	-	-	-	-
	2022-23															
11	2	1	2	-	-	-	-	-	60	15	0	10	-	-	-	-
12	2	1	-	-	-	-	-	-	52	31	5	15	15	3	6	
13	-	-	-	-	5	3	2	-	20	30	5	10	22	3	4	2
14	-	-	-	-	5	-	-	-	20	28	15	1	18	3	4	2
15	-	-	-	-	5	-	-	-	-	30	-	-	13	3	4	2
16	-	-	-	-	5	3	2	5	20	30	15	10	19	3	4	2
17	-	-	-	-	7	1	1	1	28	15	2	1	17	3	4	2
18	-	-	-	-	5	3	2	-	20	30	5	6	17	3	5	2
19	-	-	-	-	8	5	2	-	47	28	14	7	17	3	4	2
20	-	-	-	-	2	1	1	1	28	15	2	1	15	3	4	2
21	-	-	-	-	7	1	1	1	38	16	12	2	15	3	5	6
22	-	-	-	-	20	3	1	1	29	17	8	1	10	3	4	2
23	-	-	-	-	6	2	1	1	25	16	5	1	16	4	4	2
24	-	-	-	-	3	1	1	-	28	15	2	1	17	3	4	2
25	-	-	-	-	3	1	1	-	22	17	5	1	9	3	4	2
26	-	-	-	-	6	2	1	1	28	15	2	1	17	3	4	2
27	-	-	-	-	7	1	1	1	28	15	2	11	14	3	4	2
28	-	-	-	-	6	2	1	1	28	15	3	1	17	3	4	2
29	-	-	-	-	-	2	-	-	21	15	3	2	16	3	5	2
30	-	-	-	-	5	15	5	5	22	12	2	10	16	12	5	3

PART IV - On Farm Trial

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

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

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 : Nil

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	Pomegranate	Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate (2021-22)	1	3	1.0
	Chilli	Assessment of green chilli hybrid for higher productivity (2022-23)	1	5	1.2
	Pomegranate	Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate (2022-23)	1	3	1.0
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			**3**	**11**	**3.2**

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					
Post Harvest Technology/Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					

Cropping Systems					
Farm Mechanization					
Others, Pl specify					
Total					

4.B.3. Technologies assessed under 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				
Processing and Value addition				
Production and management				
Feed and fodder management				
Small scale income generating enterprises				
Others, pl. specify				
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				
Processing and Value addition				
Production and management				
Feed and fodder management				
Small scale income generating enterprises				
Others, pl. specify				
Total				

4.B.5. T**echnologies assessed under various enterprises by KVKs : Nil**

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, pl. specify				

4.B.6.T**echnologies assessed under various enterprises for women empowerment : Nil**

	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, pl. specify				

OFT1: Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate (2021-22)

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
1	2	3	4	5	6	7	8	9	10	11	12	13
Pomegranate	Irrigation	Low nutrient use efficiency & soil fertility Severe incidence of wilt (Ceratoscystis fimbriata), lower yield and Poor quality	Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate	3	TO 1 : Dr Soil Fertility Booster.	Farmer's practice	6.70	t/ha	Avg. fruit weight (g): 159 Blight incidence (%): 32.3 Wilt incidence (%): 7.3	131083	356504	3.72
					TO 2: Drenching with Aspergillus niger @ 5 gm / plant + Source: NRCP, Solapur pseudomonas @ 20 gm + drenching with VAM @ 25 gm /plant	NRCP, Solapur	7.97	t/ha	Avg. fruit weight (g): 394 Blight incidence (%): 9.6 Wilt incidence (%): 1.7	110031	423132	4.85
					TO 3: Actino bacterial consortium: Actinoplus @ 50 gm /plant.	IIHR Bengaluru	8.21	t/ha	Avg. fruit weight (g): 452 Blight incidence (%): 8.7 Wilt incidence (%): 1.1	106364	459244	5.32
					TO 4: Liquid Bio fertilizer Consortium –	IFFCO New Delhi	7.02	t/ha	Avg. fruit weight (g): 297 Blight incidence (%): 17.6 Wilt incidence (%): 3.5	111030	394413	4.55

Status of Soil	pH	EC (d Sm-1)	OC (%)	N (kg ha-1)	P2O5 (kg ha-1)	K2O (kg ha-1)
Initial	7.27	0.235	0.49	291.90	23.95	320.33
After harvest of the crop	7.31	0.243	0.46	286.36	22.65	322.65

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate	• Application of (TO3) Actino plus reduced the disease incidence, improves the fruit quality and given 22.54% yield over FP • Drenching with (TO2) Aspergillus niger + pseudomonas + VAM reduced the disease incidence, improves the fruit quality and given 18.95% yield over FP	-

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

1. Title of Technology Assessed : Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate

2. Performance of the Technology on specific indicators:-

Technology Assessed	Source of technology	Yield	Unit of yield	Observations other than yield
6	7	8	9	10
TO 1 : Dr Soil Fertility Booster.	Farmer's practice	6.70	t/ha	Avg. fruit weight (g): 159 Blight incidence (%): 32.3 Wilt incidence (%): 7.3
TO 2: Drenching with Aspergillus niger @ 5 gm / plant + Source: NRCP, Solapur pseudomonas @ 20 gm + drenching with VAM @ 25 gm /plant	NRCP, Solapur	7.97	t/ha	Avg. fruit weight (g): 394 Blight incidence (%): 9.6 Wilt incidence (%): 1.7
TO 3: Actino bacterial consortium: Actinoplus @ 50 gm /plant.	IIHR Bengaluru	8.21	t/ha	Avg. fruit weight (g): 452 Blight incidence (%): 8.7 Wilt incidence (%): 1.1
TO 4: Liquid Bio fertilizer Consortium –	IFFCO New Delhi	7.02	t/ha	Avg. fruit weight (g): 297 Blight incidence (%): 17.6 Wilt incidence (%): 3.5

3.Specific Feedback from farmers: Farmers expressed that by use of Aspergillus niger, pseudomonas, VAM, Actinoplus improves the fruit quality and increases yield.

4.Specific Feedback from Extension personnel and other stakeholders: Improves the fruit quality and increases yield

5. Feedback to Research System based on results and feedback received: Reduced the disease incidence, improves the fruit quality

6. Feedback on usefulness and constraints of technology: -

OFT2: Assessment of green chilli hybrid for higher productivity (2022-23)

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
Chilli	Irrigation	Low yielding hybrids, poor quality, leaf curling and powdery mildew disease incidence	Assessment of green chilli hybrid for higher productivity	5	**TO1:** Ulka hybrid (Pvt.)	Farmer's practice	199.0	q/ha	*	298500	183500	2.58
					TO2: Arka sanvi	IIHR(B)	225.0	q/ha		337500	230700	3.16
					TO3: Arka gagan	IIHR(B)	235.5	q/ha		353250	252650	3.51
					TO4: HY - 80	UHS (Bagalkot)	210.0	q/ha		315000	209200	2.98

* **Observations other than yield**

Parameters	TO 1: Ulka hybrid (Pvt.)	TO 2 : Arka sanvi	TO 3 : Arka gagan	TO4 : HY - 80
Fruit length (cm)	8.00	8.80	8.80	8.30
Fruit circumference (cm)	1.30	1.25	1.25	1.20
Fruit weight / plant (g)	1030	1185	1185	1195
No. of fruits / plant	181	199	199	190
Pungency	Medium	Medium	Medium	High
Leaf curling virus (%)	9.40	2.10	2.10	2.20
Incidence of bacterial wilt (%)	5.00	4.35	1.60	4.10
Gross cost (Rs./ha)	115500	106800	100600	105800

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of green chilli hybrid for higher productivity	Low incidence of bacterial wilt and leaf curling virus	Non availability seed and seedlings at local dealer and nursery respectively

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

1. Title of Technology Assessed : Assessment of chilli hybrids for disease resistance and higher productivity
2. Performance of the Technology on specific indicators:

Technology Assessed	Source of technology	Yield	Unit of yield
TO1: Ulka hybrid (Pvt.)	Farmer's practice	199.0	q/ha
TO2: Arka sanvi	IIHR(B)	225.0	q/ha
TO3: Arka gagan	IIHR(B)	235.5	q/ha
TO4: HY - 80	UHS (Bagalkot)	210.0	q/ha

* **Observations other than yield**

Parameters	TO 1: Ulka hybrid (Pvt.)	TO 2 : Arka sanvi	TO 3 : Arka gagan	TO4 : HY - 80
Fruit length (cm)	8.00	8.80	8.80	8.30
Fruit circumference (cm)	1.30	1.25	1.25	1.20
Fruit weight / plant (g)	1030	1185	1185	1195
No. of fruits / plant	181	199	199	190

Pungency	Medium	Medium	Medium	High
Leaf curling virus (%)	9.40	2.10	2.10	2.20
Incidence of bacterial wilt (%)	5.00	4.35	1.60	4.10
Gross cost (Rs./ha)	115500	106800	100600	105800

3.Specific Feedback from farmers : Lack of availability of seeds at local dealer and nursery

4.Specific Feedback from Extension personnel and other stakeholders : High yielding and market demand

5.Feedback to Research System based on results and feedback received: Low incidence of bacterial wilt and leaf curling virus

6. Feedback on usefulness and constraints of technology: Non availability seed and seedlings at local dealer and nursery respectively

OFT3: Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate (2022-23)

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
1	2	3	4	5	6	7	8	9	10	11	12	13
Pomegranate	Irrigation	Low nutrient use efficiency & soil fertility Severe incidence of wilt (Ceratoscystis fimbriata), lower yield and Poor quality	Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate	3	TO 1 : Imbalanced use of Fertilizer	Farmer's practice	7.80	t/ha	Avg. fruit weight (g): 131 Blight incidence (%): 31.0 Wilt incidence (%): 7.4	780000	494717	2.73
					TO 2: Drenching with Aspergillus niger @ 5 gm / plant + Source: NRCP, Solapur pseudomonas @ 20 gm + drenching with VAM @ 25 gm /plant	NRCP, Solapur	9.65	t/ha	Avg. fruit weight (g): 346 Blight incidence (%): 9.4 Wilt incidence (%): 1.7	965000	750769	4.50
					TO 3: Actino bacterial consortium: Actinoplus @ 50 gm /plant.	IIHR Bengaluru	10.0	t/ha	Avg. fruit weight (g): 425 Blight incidence (%): 8.5 Wilt incidence (%): 1.5	1015000	804436	4.82
					TO 4: Liquid Bio fertilizer Consortium –	IFFCO New Delhi	8.45	t/ha	Avg. fruit weight (g): 264 Blight incidence (%): 16.5 Wilt incidence (%): 2.7	845000	629770	3.93

Status of Soil	pH	EC (d Sm-1)	OC (%)	N (kg ha-1)	P2O5 (kg ha-1)	K2O (kg ha-1)
Initial	7.27	0.235	0.49	291.90	23.95	320.33
After harvest of the crop	7.31	0.243	0.46	286.36	22.65	322.65

4. C2. Feedback on technologies assessed

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate	• Application of (TO3) Actino plus reduced the disease incidence, improves the fruit quality and given 28.20% yield over FP • Drenching with (TO2) Aspergillus niger + pseudomonas + VAM reduced the disease incidence, improves the fruit quality and given 23.71% yield over FP	-

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

1. Title of Technology Assessed : Assessment of bio formulations for improving productivity, Quality and management of disease in Pomegranate

2. Performance of the Technology on specific indicators:-

Technology Assessed	Source of technology	Yield	Unit of yield	Observations other than yield
TO 1 : Imbalanced use of Fertilizer	Farmer's practice	7.80	t/ha	Avg. fruit weight (g): 131 Blight incidence (%): 31.0 Wilt incidence (%): 7.4
TO 2: Drenching with Aspergillus niger @ 5 gm / plant + Source: NRCP, Solapur pseudomonas @ 20 gm + drenching with VAM @ 25 gm /plant	NRCP, Solapur	9.65	t/ha	Avg. fruit weight (g): 346 Blight incidence (%): 9.4 Wilt incidence (%): 1.7
TO 3: Actino bacterial consortium: Actinoplus @ 50 gm /plant.	IIHR Bengaluru	10.0	t/ha	Avg. fruit weight (g): 425 Blight incidence (%): 8.5 Wilt incidence (%): 1.5
TO 4: Liquid Bio fertilizer Consortium –	IFFCO New Delhi	8.45	t/ha	Avg. fruit weight (g): 264 Blight incidence (%): 16.5 Wilt incidence (%): 2.7

3.Specific Feedback from farmers: Farmers expressed that by use of Aspergillus niger, pseudomonas, VAM, Actinoplus improves the fruit quality and increases yield.

4.Specific Feedback from Extension personnel and other stakeholders: Improves the fruit quality and increases yield

5. Feedback to Research System based on results and feedback received: Reduced the disease incidence, improves the fruit quality

6. Feedback on usefulness and constraints of technology: -

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

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

4.D.2. Details of Technologies refined:

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

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented

Sl. No.	Category	Farming Situation	Season	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		Farmers (No.)		Farmers (No.)	
									Proposed	Actual	SC/ST	Others	Small/ Marginal	Others
	Oilseeds													
	Pulses	Rainfed	Kharif	Black Gram	LBG-791	-	Introduction variety	**Demonstration of Yellow Mosaic Virus Resistant Black Gram Variety LBG-791 (2022-23)** • Use of YMV resistant variety LBG-791 • Spraying of Pulse magic @ 10g/ L • Spraying Carbendazim @ 1 g/L	4	4	2	8	2	8
	Cereals													
	Millets	Rainfed	Kharif	Finger millet	KMR - 630	-	Introduction variety	**Demonstration of Finger millet variety KMR – 630 (2022-23)** *Use of short duration & blast resistant variety KMR -630 *Micronutrients (ZnSO4, 10 kg/ha)	4	4	0	10	4	6
	Millets	Rainfed	Kharif	Foxtail Millet	DHFT 109-3	-	Value Addition	**Demonstration of Foxtail Millet Variety DHFT 109-3 and it's Value Addition (2022-23)** • Demonstration of Fox tail millet variety DHFT-109-3 • Demonstration of Foxtail millet value added products viz., laddu, bisibele bath, hurakki holige, nippattu	2	2	1	4	2	3
	Vegetables	Irrigated	Rabi 2021	Hebbal avare	HA-4	-	Inter cropping	**intercropping of Hebbal avare in younger Arecanut garden (2021-22)** • Hebbal avare as a intercrop in Arecanut	2.0	2.0	5	1	6	-

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
								garden • Seed treatment with Rhizobium • Need based Plant Protection Chemical						
	Vegetables	Irrigated	Rabi 2022	Hebbal avare	HA-4	-	Inter cropping	**Intercropping of Hebbal avare in younger Arecanut garden (2022-23)** • Hebbal avare as a intercrop in Arecanut garden • Seed treatment with Rhizobium • Need based Plant Protection Chemical	2.0	2.0	0	5	2	3
	Vegetables	Irrigated	Kharif	Brinjal	Arka Harshitha	-	Introduction variety	**Demonstration of Arka actino plus on growth and yield of brinjal (2022-23)** • Use of verity Arka Harshitha • Seed treatment: ACT-10g/100g of seeds • ACT : 20g / lit of water and apply near root zone on 10th Day after Transplantation • Vegetable Special : Spray 3 g / lit after 30 DAT • Pheromone traps : 10 Nos. / acre for shoot and fruit borer. Need based Plant Protection Chemical	2.0	2.0	0	5	0	5
	vegetable	Irrigated	Rabi	Tomato	--	Arka Abedha	ICM	**Integrated Crop Management in Tomato (2022-23)** • Use of high yield Hybrid - Arka Abedha multi disease resistant variety • Mulching with fertigation • Foliar spray of Vegetable special @ 5 g/L • Application of Neem cake & AMC • Plant Protection: fruit borer with Indoxicarb @ 0.3 ml/L water	3	3	5	10	10	5

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
	Vegetables	Irrigated	Kharif	Chilli	--	KBCH-1	ICM	**Integrated Crop Management in chilli (2022-23)** • Use of high yield Hybrid –KBCH-1 • Foliar spray of Vegetable special @ 5g / liter • Spray of Planofix (0.02%) for control of flower drop • Need based Plant Protection Chemical	2	2	2	8	8	2
	Flowers													
	Ornamental													
	Fruit	Rainfed	Perennial	Mango	Alphanso	--	ICM	**Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2021-22)** *Application of Paclobutrazol drenching @ 5 ml/ 10 liter of water for inducing regular bearing *Use of Mango special @ 5 g/L *Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop *Plant Protection: powdery mildew - Carbendazim @ 1 g/L hopper– Imidachloprid @ 0.3 ml/L & Fruit fly – traps 20 No./ha	3	3	0	15	10	5
	Fruit	Rainfed	Perennial	Mango	Alphanso	--	ICM	**Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2022-23)** *Application of Paclobutrazol drenching @ 5 ml/ 10 liter of water for inducing regular	3	3	1	14	9	6

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
								bearing *Use of Mango special @ 5 g/L *Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop *Plant Protection: powdery mildew - Carbendazim @ 1 g/L hopper– Imidachloprid @ 0.3 ml/L & Fruit fly – traps 20 No./ha						
	Fruit	Irrigated	Perennial	Banana	Puttabale	--	INM	**Integrated Nutrient Management in Banana (Var. Puttabale) (2021-22)** • Application of RDF NPK 180:108:225 NPK g/pl (three spilt doses), • Use of Banana special – 5 spray @ 5 g/L, AMC and Neem cake • Leaving One sucker per plant (More than 2 sucker in FP) • Bunch feeding (500 g fresh cow dung+ 100 ml water+ • 2.5 g urea + 2.5 g SOP) • Plant Protection: Panama wilt & sigatoka disease – Carbendizim @3g/lt Propiconazole @ 1 ml/L	1	1	0	5	5	0
	Fruit	Irrigated	Perennial	Banana	Puttabale	--	INM	**Integrated crop Management in Banana (Var. Puttabale) (2022-23)** • Application of RDF NPK 180:108:225 NPK g/pl (three spilt doses), • Use of Banana special – 5 spray @ 5 g/L, AMC and Neem cake • Leaving One sucker per plant (More than 2 sucker in FP) • Bunch feeding (500 g fresh cow dung+ 100 ml water+	1	1	0	5	4	1

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
								• 2.5 g urea + 2.5 g SOP) • Plant Protection: Panama wilt & sigatoka disease – Carbendizim @3g/lt Propiconazole @ 1 ml/L						
	Fruit	Irrigated	Perennial	Banana	Puttabale	--	value addition	**Processing and Value Addition of Banana as IGA (2022-23)** • Demonstration of banana powder preparation and it's value addition (Shavige, Roti & chapathi) • packaging, branding and labelling	2 SHG	2 SHG	-	-	-	-
	Fruit	Irrigated	Perennial	Tamarind	Local	--	Value addition	**Processing and Branding of Tamarind Value added products (2021-22)** • Demonstration on preparation of tamarind slabs, tamarind tokku, puliogare powder and tamarind lollypop • Branding, packaging, labeling and market linkage of tamarind value added products	1 SHG	1 SHG	0	20	0	20
	Spices and condiments	Rainfed	Kharif	Ginger	-	-	IDM	**Management of Rhizome rot complex in Ginger (2022-23)** • Spraying Thiomethaxam 25 WG @ 0.25 g / L • Spraying Copper Oxy chloride 3 g/ L • Placing 2 g Thiomethaxam 25 WG in Leaf whorl @ 2 sachets/ palm • Placing 2 g Metalaxyl + mancozeb 75 WP in Leaf whorl @ 2 sachets/ palm	2	2	0	5	1	4
	Commercial													

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
	Medicinal and aromatic													
	Fodder	Rainfed	Perennial	Fodder-COFs-31	COFs-31	--	fodder development	**Demonstration of COFS-31 Fodder Crop as Inter Crop in Coconut Garden (2022-23)** • Use of high yielding fodder variety CoFS 31 has a intercrop in Coconut garden • A high green fodder yielding and non seed shattering multi-cut fodder sorghum culture. • Use of Trichodarma	2	2	2	8	3	7
	Plantation	Irrigated	Perennial	Coconut	-	-	INM	**Integrated nutrient management in Coconut (2021-22)** *Soil test based nutrient application (Soil Application of Urea @ 1.1 kg, SSP @ 1.25 kg, MOP @ 2 kg, Borax @ 50 g, Zink sulphate @ 5g, $MgSO_4$ @ 500 g) *Mucuna as intercrops which improve soil N content *Soil application of Neem cake @ 5 kg + *Trichoderma* and *Pseudomonas fluoroscens* @ 100 g each / palm/ year	2	2	-	10	-	10
	Plantation	Irrigated	Perennial	Arecanut	Hirehalli local	-	INM	**Enhancement of productivity in Arecanut through nutrient Management (2021-22)** • Soil test based nutrient application 100:40:140 g NPK/palm/yr • Application of Boron 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting • Soil application of Neem cake @ 3 kg + Trichoderma and	2	2	-	10	-	10

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
								Pseudomonas fluoroscens @ 100g each / palm/ year • Cowpea as green manures, which improve soil fertility status • Plant Protection: Ganoderma wilt – drenching COC @ 3 g/L						
	Plantation	Irrigated	Perennial	Arecanut	Hirehalli local	-	INM	**Enhancement of productivity in Arecanut through nutrient Management (2022-23)** • Soil test based nutrient application 100:40:140 g NPK/palm/yr • Application of Boron 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting • Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year • Cowpea as green manures, which improve soil fertility status • Plant Protection: Ganoderma wilt – drenching COC @ 3 g/L	2	2	-	10	-	10
	Plantation	Irrigated	Perennial	Arecanut	Hirehalli local	-	IPDM	**Management of Spindle Bug and Bud Rot in Younger Arecanut Garden (2022-23)** • Spraying Thiomethaxam 25 WG @ 0.25 g / L • Spraying Copper Oxy chloride 3 g/ L • Placing 2 g Thiomethaxam 25 WG in Leaf whorl @ 2 sachets/ palm • Placing 2 g Metalaxyl + mancozeb 75 WP in Leaf whorl @ 2 sachets/ palm	2	2	-	10	-	10
	Plantation	Irrigated	Perennial	Coconut	-	-	IPM	**Management of Rugose whitefly in coconut (2021-22)**	2	2	0	5	0	5

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
								• Use of Yellow Sticky Traps @25/ha • Spraying Neem oil @ 0.5% (5 ml / L) + boiled Maida flour paste @ 25 g/L • Spraying Entomopathogenic fungus Isaria fumosorosea @ 2X 10 8 spores /ml (5g/lL) – Two sprays at 15 days interval						
	Plantation	Irrigated	Perennial	Coconut	-	-	IPM	**Management of Rugose whitefly in coconut (2022-23)** • Use of Yellow Sticky Traps @25/ha • Spraying Neem oil @ 0.5% (5 ml / L) + boiled Maida flour paste @ 25 g/L • Spraying Entomopathogenic fungus Isaria fumosorosea @ 2X 10 8 spores /ml (5g/lL) – Two sprays at 15 days interval	10	10	5	20	5	20
	Plantation	Irrigated	Perennial	Coconut	-	-	value addition	**Coconut : Value Addition, Branding and Market Linkage (2021-22)** • Demonstration on preparation of coconut value added products i.e coconut burfi and coconut chips • Branding, packaging, labeling and market linkage of coconut value added products	2 SHG	2 SHG	0	40	10	30
	Fibre													
	Dairy	-	-	cow	Cross breed	-	IDM	**Integrated Approaches to Combat Anaemia in**	10 animals	10 animals	1	9	1	9

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
					animals			**Dairy Cattle (2022-23)** • Importance of Phosphorus and Vitamins • Proper trace mineral supplementation for rejuvenation of RBC (Iron) • Importance of regular Deworming • Use of Animal lifter						
	Dairy	-	-	cow	Cross breed animals	-	IDM	**Integrated approaches to combat Anestrus in dairy cattle (2022-23)** • Hormonal Therapy (gonadotropin releasing hormone (GnRH) followed by prostaglandin and again followed by GnRH.) • Importance of Phosphorus and Vitamins • Importance of regular Deworming	10 animals	10 animals	0	10	0	10
	Poultry													
	Rabbitry													
	Piggery													
	Sheep and goat													
	Duckery													
	Common carps													

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
	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
	Others (specify)													
	Nutrition garden	Irrigated	Kharif / Rabi/ summer	nutrition garden	-	-	nutrition garden	**Nutrition security of farm families through nutrition garden(2021-22)** • Micronutrient deficiencies also referred to as 'Hidden Hunger' affects the health, learning ability as well as productivity owing to high rates of illness and disability contributing to malnutrition, underdevelopment and poverty. • Nutri garden is a	30 family	30 family	0	30	15	15

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
								multidimensional effort to reduce malnutrition.						
	Nutrition garden	Irrigated	Kharif / Rabi/ summer	nutrition garden	-	-	nutrition garden	**Nutrition security of farm families through nutrition garden(2022-23)** • Micronutrient deficiencies also referred to as 'Hidden Hunger' affects the health, learning ability as well as productivity owing to high rates of illness and disability contributing to malnutrition, underdevelopment and poverty. • Nutri garden is a multidimensional effort to reduce malnutrition.	30 family	30 family	0	30	10	20

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

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil			Previous crop grown
										N	P	K	
	Oilseeds												
	Pulses	Rainfed	Kharif	Black Gram	LBG-791	-	Introduction variety	**Demonstration of Yellow Mosaic Virus Resistant Black Gram Variety LBG-791 (2022-23)** • Use of YMV resistant variety LBG-791 • Spraying of Pulse magic @ 10g/ L • Spraying Carbendazim @ 1 g/L	Kharif 2022	L	M	L	Finger millet
	Cereals												
	Millets	Rainfed	Kharif	Finger millet	KMR - 630	-	Introduction variety	**Demonstration of Finger millet variety KMR – 630 (2022-23)** *Use of short duration & blast resistant variety KMR -630 *Micronutrients (ZnSO4, 10 kg/ha)	Kharif 2022	H	M	L	Finger millet
	Millets	Rainfed	Kharif	Foxtail	DHFT	-	Value	**Demonstration of Foxtail Millet Variety**	Kharif	H	L	L	Foxtail

				Millet	109-3		Addition	**DHFT 109-3 and it's Value Addition (2022-23)** • Demonstration of Fox tail millet variety DHFT-109-3 • Demonstration of Foxtail millet value added products viz., laddu, bisibele bath, hurakki holige, nippattu	2022				Millet
	Vegetables	Irrigated	Rabi 2021	Hebbal avare	HA-4	-	Inter cropping	**intercropping of Hebbal avare in younger Arecanut garden (2021-22)** • Hebbal avare as a intercrop in Arecanut garden • Seed treatment with Rhizobium • Need based Plant Protection Chemical	Rabi 2021	L	L	M	-
	Vegetables	Irrigated	Rabi 2022	Hebbal avare	HA-4	-	Inter cropping	**Intercropping of Hebbal avare in younger Arecanut garden (2022-23)** • Hebbal avare as a intercrop in Arecanut garden • Seed treatment with Rhizobium • Need based Plant Protection Chemical	Rabi 2022	L	L	M	-
	Vegetables	Irrigated	Kharif	Brinjal	Arka Harshitha	-	Introduction variety	**Demonstration of Arka actino plus on growth and yield of brinjal (2022-23)** • Use of verity Arka Harshitha • Seed treatment: ACT-10g/100g of seeds • ACT : 20g / lit of water and apply near root zone on 10th Day after Transplantation • Vegetable Special : Spray 3 g / lit after 30 DAT • Pheromone traps : 10 Nos. / acre for shoot and fruit borer. Need based Plant Protection Chemical	Kharif 2022	M	M	M	Tomato
	vegetable	Irrigated	Rabi	Tomato	--	Arka Abedha	ICM	**Integrated Crop Management in Tomato (2022-23)** • Use of high yield Hybrid -Arka Abedha multi disease resistant variety • Mulching with fertigation • Foliar spray of Vegetable special @ 5 g/L • Application of Neem cake & AMC • Plant Protection: fruit borer with Indoxicarb @ 0.3 ml/L water	Kharif 2022	H	M	L	Vegetable-Chilli
	Vegetables	Irrigated	Kharif	Chilli	--	KBCH-1	ICM	**Integrated Crop Management in chilli (2022-23)** • Use of high yield Hybrid –KBCH-1 • Foliar spray of Vegetable special @ 5g / liter • Spray of Planofix (0.02%) for control of flower drop • Need based Plant Protection Chemical	Kharif 2022	M	M	L	Cowpea

	Flowers												
	Ornamental												
	Fruit	Rainfed	Perennial	Mango	Alphanso	--	ICM	**Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2021-22)** *Application of Paclobutrazol drenching @ 5 ml/ 10 liter of water for inducing regular bearing *Use of Mango special @ 5 g/L *Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop *Plant Protection: powdery mildew - Carbendazim @ 1 g/L hopper– Imidachloprid @ 0.3 ml/L & Fruit fly – traps 20 No./ha	Perennial	M	M	L	Mango
	Fruit	Rainfed	Perennial	Mango	Alphanso	--	ICM	**Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2022-23)** *Application of Paclobutrazol drenching @ 5 ml/ 10 liter of water for inducing regular bearing *Use of Mango special @ 5 g/L *Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop *Plant Protection: powdery mildew - Carbendazim @ 1 g/L hopper– Imidachloprid @ 0.3 ml/L & Fruit fly – traps 20 No./ha	Perennial	M	M	L	Mango
	Fruit	Irrigated	Perennial	Banana	Puttabale	--	INM	**Integrated Nutrient Management in Banana (Var. Puttabale) (2021-22)** • Application of RDF NPK 180:108:225 NPK g/pl (three spilt doses), • Use of Banana special – 5 spray @ 5 g/L, AMC and Neem cake • Leaving One sucker per plant (More than 2 sucker in FP) • Bunch feeding (500 g fresh cow dung+ 100 ml water+ • 2.5 g urea + 2.5 g SOP) • Plant Protection: Panama wilt & sigatoka disease – Carbendizim @3g/lt Propiconazole @ 1 ml/L	Perennial	M	M	L	coconut
	Fruit	Irrigated	Perennial	Banana	Puttabale	--	INM	**Integrated crop Management in Banana**	Perennial	M	M	L	coconut

								(Var. Puttabale) (2022-23) • Application of RDF NPK 180:108:225 NPK g/pl (three spilt doses), • Use of Banana special – 5 spray @ 5 g/L, AMC and Neem cake • Leaving One sucker per plant (More than 2 sucker in FP) • Bunch feeding (500 g fresh cow dung+ 100 ml water+ • 2.5 g urea + 2.5 g SOP) • Plant Protection: Panama wilt & sigatoka disease – Carbendizim @3g/lt Propiconazole @ 1 ml/L					
	Fruit	Irrigated	Perennial	Banana	Puttabale	--	value addition	**Processing and Value Addition of Banana as IGA (2022-23)** • Demonstration of banana powder preparation and it's value addition (Shavige, Roti & chapathi) • packaging, branding and labelling	Perennial	H	M	L	coconut
	Fruit	Irrigated	Perennial	Tamarind	Local	--	Value addition	**Processing and Branding of Tamarind Value added products (2021-22)** • Demonstration on preparation of tamarind slabs, tamarind tokku, puliogare powder and tamarind lollypop • Branding, packaging, labeling and market linkage of tamarind value added products	Perennial	M	M	L	Tamarind
	Spices and condiments	Rainfed	Kharif	Ginger	-	-	IDM	**Management of Rhizome rot complex in Ginger (2022-23)** • Spraying Thiomethaxam 25 WG @ 0.25 g / L • Spraying Copper Oxy chloride 3 g/ L • Placing 2 g Thiomethaxam 25 WG in Leaf whorl @ 2 sachets/ palm • Placing 2 g Metalaxyl + mancozeb 75 WP in Leaf whorl @ 2 sachets/ palm	Kharif 2022	M	M	L	Chilli
	Commercial												
	Medicinal and aromatic												
	Fodder	Rainfed	Perennial	Fodder-COFs-31	COFs-31	--	fodder development	**Demonstration of COFS-31 Fodder Crop as Inter Crop in Coconut Garden (2022-23)** • Use of high yielding fodder variety CoFS 31 has a intercrop in Coconut garden • A high green fodder yielding and non seed	Perennial	M	M	L	-

								shattering multi-cut fodder sorghum culture. • Use of Trichodarma					
	Plantation	Irrigated	Perennial	Coconut	-	-	INM	**Integrated nutrient management in Coconut (2021-22)** *Soil test based nutrient application (Soil Application of Urea @ 1.1 kg, SSP @ 1.25 kg, MOP @ 2 kg, Borax @ 50 g, Zink sulphate @ 5g, $MgSO_4$ @ 500 g) *Mucuna as intercrops which improve soil N content *Soil application of Neem cake @ 5 kg + *Trichoderma* and *Pseudomonas fluoroscens* @ 100 g each / palm/ year	Perennial	H	M	L	coconut
	Plantation	Irrigated	Perennial	Arecanut	Hirehalli local	-	INM	**Enhancement of productivity in Arecanut through nutrient Management (2021-22)** • Soil test based nutrient application 100:40:140 g NPK/palm/yr • Application of Boron 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting • Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year • Cowpea as green manures, which improve soil fertility status • Plant Protection: Ganoderma wilt – drenching COC @ 3 g/L	Perennial	M	M	L	Arecanut
	Plantation	Irrigated	Perennial	Arecanut	Hirehalli local	-	INM	**Enhancement of productivity in Arecanut through nutrient Management (2022-23)** • Soil test based nutrient application 100:40:140 g NPK/palm/yr • Application of Boron 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting • Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year • Cowpea as green manures, which improve soil fertility status • Plant Protection: Ganoderma wilt – drenching COC @ 3 g/L	Perennial	M	M	L	Arecanut
	Plantation	Irrigated	Perennial	Arecanut	Hirehalli local	-	IPDM	**Management of Spindle Bug and Bud Rot in Younger Arecanut Garden (2022-23)** • Spraying Thiomethaxam 25 WG @ 0.25 g / L • Spraying Copper Oxy chloride 3 g/ L • Placing 2 g Thiomethaxam 25 WG in Leaf whorl @ 2 sachets/ palm	Perennial	M	M	L	Arecanut

								• Placing 2 g Metalaxyl + mancozeb 75 WP in Leaf whorl @ 2 sachets/ palm					
	Plantation	Irrigated	Perennial	Coconut	-	-	IPM	**Management of Rugose whitefly in coconut (2021-22)** • Use of Yellow Sticky Traps @25/ha • Spraying Neem oil @ 0.5% (5 ml / L) + boiled Maida flour paste @ 25 g/L • Spraying Entomopathogenic fungus Isaria fumosorosea @ 2X 10 8 spores /ml (5g/lL) – Two sprays at 15 days interval	Perennial	M	M	L	coconut
	Plantation	Irrigated	Perennial	Coconut	-	-	IPM	**Management of Rugose whitefly in coconut (2022-23)** • Use of Yellow Sticky Traps @25/ha • Spraying Neem oil @ 0.5% (5 ml / L) + boiled Maida flour paste @ 25 g/L • Spraying Entomopathogenic fungus Isaria fumosorosea @ 2X 10 8 spores /ml (5g/lL) – Two sprays at 15 days interval	Perennial	M	M	L	coconut
	Plantation	Irrigated	Perennial	Coconut	-	-	value addition	**Coconut : Value Addition, Branding and Market Linkage (2021-22)** • Demonstration on preparation of coconut value added products i.e coconut burfi and coconut chips • Branding, packaging, labeling and market linkage of coconut value added products	Perennial	M	M	L	coconut
	Fibre												

5.B. Results of FLDs

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% 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								
Oilseeds																	

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Pulses	**Demonstration of Yellow Mosaic Virus Resistant Black Gram Variety LBG-791 (2022-23)** • Use of YMV resistant variety LBG-791 • Spraying of Pulse magic @ 10g/ L • Spraying Carbendazim @ 1 g/L	LBG-791	-	Kharif	10	4					Initiated stage						
Cereals																	
Millets	**Demonstration of Finger millet variety KMR – 630 (2022-23)** *Use of short duration & blast resistant variety KMR -630 *Micronutrients (ZnSO4, 10 kg/ha)	KMR – 630	-	Kharif	10	4	23.5	20.6	22.8	17.4	31.03	65550	40040	2.56	50025	23325	1.87
Millets	**Demonstration of Foxtail Millet Variety DHFT 109-3 and it's Value Addition (2022-23)** • Demonstration of Fox tail millet variety DHFT-109-3 • Demonstration of Foxtail millet value added products viz., laddu, bisibele bath, hurakki holige, nippattu	DHFT 109-3	-	Kharif	5	2	11.95	10.84	11.89	9.72	22.32	-	-	-	-	-	-

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Vegetables	**Intercropping of Hebbal avare in younger Arecanut garden (2021-22)** • Hebbal avare as a intercrop in Arecanut garden • Seed treatment with Rhizobium • Need based Plant Protection Chemical	HA-4	-	Rabi 2021	6	2.0	Hebbal avare yield			mono crop	-	55772	39272	3.38	-	-	-
							22.0	19.0	21.5								
Vegetables	**Intercropping of Hebbal avare in younger Arecanut garden (2022-23)** • Hebbal avare as a intercrop in Arecanut garden • Seed treatment with Rhizobium • Need based Plant Protection Chemical	HA-4	-	Rabi 2022	5	2.0	Hebbal avare yield			mono crop	-	50000	29500	2.43	-	-	-
							22.2	19.1	20.0								
Vegetables	**Demonstration of Arka actino plus on growth and yield of brinjal (2022-23)** • Use of verity Arka Harshitha • Seed treatment: ACT-10g/100g of seeds • ACT : 20g / lit of water and apply near root zone on 10th Day after Transplantation • Vegetable Special : Spray 3 g / lit after 30 DAT • Pheromone traps : 10 Nos. / acre for shoot and fruit borer. Need based Plant Protection Chemical	Arka Harshitha	-	Kharif	5	2.0	39.5	32.0	38.0	30.12	26.16	570000	433550	4.17	451800	323520	3.52

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Flowers																	
Ornamental																	
Fruit	**Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2021-22)** *Application of Paclobutrazol drenching @ 5 ml/ 10 liter of water for inducing regular bearing *Use of Mango special @ 5 g/L *Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop *Plant Protection: powdery mildew - Carbendazim @ 1 g/L hopper– Imidachloprid @ 0.3 ml/L & Fruit fly – traps 20 No./ha	Alphanso	--	Perennial	15	3	95.60	80.63	94.50	79.30	19.17	1,51,200	1,05,600	3.32	1,26,880	78,380	2.62

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Fruit	**Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2022-23)** *Application of Paclobutrazol drenching @ 5 ml/ 10 liter of water for inducing regular bearing *Use of Mango special @ 5 g/L *Spraying 20 ppm NAA at pea size of fruits followed by 2% urea to reduce fruit drop *Plant Protection: powdery mildew - Carbendazim @ 1 g/L hopper– Imidachloprid @ 0.3 ml/L & Fruit fly – traps 20 No./ha	Alphanso	--	Perennial	15	3						In progress (Flowering stage)					

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Fruit	**Integrated Nutrient Management in Banana (Var. Puttabale) (2021-22)** • Application of RDF NPK 180:108:225 NPK g/pl (three spilt doses), • Use of Banana special – 5 spray @ 5 g/L, AMC and Neem cake • Leaving One sucker per plant (More than 2 sucker in FP) • Bunch feeding (500 g fresh cow dung+ 100 ml water+ • 2.5 g urea + 2.5 g SOP) • Plant Protection: Panama wilt & sigatoka disease – Carbendizim @3g/lt Propiconazole @ 1 ml/L	Puttabale	--	Perennial	5	1	355	295	340	260	30.77	4,42,000	3,07,000	3.27	3,38,000	1,91,500	2.31

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Fruit	**Integrated crop Management in Banana (Var. Puttabale) (2022-23)** • Application of RDF NPK 180:108:225 NPK g/pl (three spilt doses), • Use of Banana special – 5 spray @ 5 g/L, AMC and Neem cake • Leaving One sucker per plant (More than 2 sucker in FP) • Bunch feeding (500 g fresh cow dung+ 100 ml water+ • 2.5 g urea + 2.5 g SOP) • Plant Protection: Panama wilt & sigatoka disease – Carbendizim @3g/lt Propiconazole @ 1 ml/L	Puttabale	--	Perennial	5	1						Flowering stage					

<table>
<tr><th rowspan="3">Crop</th><th rowspan="3">Name of the technology demonstrated</th><th rowspan="3">Variety</th><th rowspan="3">Hybrid</th><th rowspan="3">Farming situation</th><th rowspan="3">No. of Demo.</th><th rowspan="3">Area (ha)</th><th colspan="3">Yield (q/ha)</th><th colspan="3">Economics of demonstration (Rs./ha)</th><th colspan="3">Economics of check (Rs./ha)</th></tr>
<tr><th>Demo</th><th>Check</th><th>% Increase</th><th>Gross Return</th><th>Net Return</th><th>BCR</th><th>Gross Return</th><th>Net Return</th><th>BCR</th></tr>
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<tr>
<td>Fruit</td>
<td>Processing and Branding of Tamarind Value added products (2021-22)
Demonstration on preparation of tamarind slabs, tamarind tokku, puliogare powder and tamarind lollypop
Branding, packaging, labeling and market linkage of tamarind value added products</td>
<td>Local</td>
<td>--</td>
<td>Perennial</td>
<td>20</td>
<td>1 SHG</td>
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<tr><td>Employment generation</td><td>10 members</td></tr>
<tr><td colspan="2">Market channels
Krishi mela,Departmental stores and Manthri square mall</td></tr>
<tr><td>Quantity produced</td><td>175-200 KGs</td></tr>
<tr><td>Average earning/member</td><td>Rs11500-13000</td></tr>
<tr><td>No of days of employment</td><td>60 days</td></tr>
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<tr><th>Particulars</th><th colspan="4">Tamarind Value added products</th></tr>
<tr><th>Tamarind</th><th>Processed tamarind</th><th>Tamarind gojju</th><th>Puliogare powder</th><th>Tamarind lollypop</th></tr>
<tr><td>Gross Cost (Rs/qtl)</td><td>5,500</td><td>12,000</td><td>13,600</td><td>15,000</td></tr>
<tr><td>Gross Returns (Rs/qtl)</td><td>9,000</td><td>30,000</td><td>31,000</td><td>50,000</td></tr>
<tr><td>Net Returns (Rs/qtl)</td><td>3,500</td><td>18,000</td><td>17,400</td><td>35,000</td></tr>
<tr><td>B:C Ratio</td><td>1.63</td><td>2.50</td><td>2.27</td><td>3.33</td></tr>
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<td>Fruit</td>
<td>Processing and Value Addition of Banana as IGA (2022-23)
Demonstration of banana powder preparation and it’s value addition (Shavige, Roti & chapathi)
packaging, branding and labelling</td>
<td>Puttabale</td>
<td>--</td>
<td>Perennial</td>
<td>-</td>
<td>2 SHG</td>
<td colspan="12">In progress (Registration to FSSAI, Branding and market linkage)</td>
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<tr><th>Demo</th><th>Check</th><th>Gross Return</th><th>Net Return</th><th>BCR</th><th>Gross Return</th><th>Net Return</th><th>BCR</th></tr>
<tr><td>Spices and condiments</td><td>Management of Rhizome rot complex in Ginger (2022-23)
Spraying Thiomethaxam 25 WG @ 0.25 g / L
Spraying Copper Oxy chloride 3 g/ L
Placing 2 g Thiomethaxam 25 WG in Leaf whorl @ 2 sachets/ palm
Placing 2 g Metalaxyl + mancozeb 75 WP in Leaf whorl @ 2 sachets/ palm</td><td>-</td><td>-</td><td>Kharif</td><td>5</td><td>2</td><td colspan="10"><table>
<tr><th rowspan="2">Parameters</th><th colspan="4">Pre treatment</th><th colspan="4">Post treatment</th></tr>
<tr><th>Initial plants (No’s)</th><th>No of sprouts</th><th>Plant height (cm)</th><th>Disease incidence (%)</th><th>Initial plants (No’s)</th><th>No of sprouts</th><th>Plant height (cm)</th><th>Disease incidence (%)</th></tr>
<tr><td>Demo plot</td><td>6.65</td><td>2.46</td><td>30.2</td><td>51.5</td><td>8.5</td><td>2.58</td><td>35.6</td><td>20.5</td></tr>
<tr><td>Check plot</td><td>6.46</td><td>2.24</td><td>32.4</td><td>40.5</td><td>7.5</td><td>2.36</td><td>32.4</td><td>88.5</td></tr>
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<tr><td>Medicinal and aromatic</td><td></td><td></td><td></td><td></td><td></td><td></td><td colspan="10"></td></tr>
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<tr><td>Fodder</td><td>Demonstration of</td><td>COFs-31</td><td>--</td><td>Perennial</td><td>10</td><td>2</td><td colspan="3">Avg. yield (t/ha)</td><td>25.9</td><td>44600</td><td>27000</td><td>2.53</td><td>35400</td><td>14850</td><td>1.72</td></tr>
</table>

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
	COFS-31 Fodder Crop as Inter Crop in Coconut Garden (2022-23) • Use of high yielding fodder variety CoFS 31 has a intercrop in Coconut garden • A high green fodder yielding and non seed shattering multi-cut fodder sorghum culture. • Use of Trichodarma						22.5	20.2	22.3	17.7							
Plantation	**Integrated nutrient management in Coconut (2021-22)** *Soil test based nutrient application (Soil Application of Urea @ 1.1 kg, SSP @ 1.25 kg, MOP @ 2 kg, Borax @ 50 g, Zink sulphate @ 5g, $MgSO_4$ @ 500 g) *Mucuna as intercrops which improve soil N content *Soil application of Neem cake @ 5 kg + *Trichoderma* and *Pseudomonas fluoroscens* @ 100 g each / palm/ year	-	-	Perennial	10	2	nuts/ ha/ year				20.91	162810	118610	3.68	1,19,700	74,367	2.64
							9250	8720	9045	7481							

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
							yield (q/ha/year)										
Plantation	**Enhancement of productivity in Arecanut through nutrient Management (2021-22)** • Soil test based nutrient application 100:40:140 g NPK/palm/yr • Application of Boron 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting • Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year • Cowpea as green manures, which improve soil fertility status • Plant Protection: Ganoderma wilt – drenching COC @ 3 g/L	Hirehalli local	-	Perennial	10	2	14.95	12.70	14.85	12.10	22.73	4,15,800	2,85,300	3.19	3,38,800	2,05,900	2.55

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo			Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Plantation	**Enhancement of productivity in Arecanut through nutrient Management (2022-23)** • Soil test based nutrient application 100:40:140 g NPK/palm/yr • Application of Boron 30 g/palm/yr + MOP 230 g/palm/year for control of nut dropping and splitting • Soil application of Neem cake @ 3 kg + Trichoderma and Pseudomonas fluoroscens @ 100g each / palm/ year • Cowpea as green manures, which improve soil fertility status • Plant Protection: Ganoderma wilt – drenching COC @ 3 g/L	Hirehalli local	-	Perennial	10	2	15.96	13.20	15.85	12.34	24.73	3,90,800	2,70,300	3.24	3,18,200	2,07,600	2.88

<table>
<tr><th rowspan="3">Crop</th><th rowspan="3">Name of the technology demonstrated</th><th rowspan="3">Variety</th><th rowspan="3">Hybrid</th><th rowspan="3">Farming situation</th><th rowspan="3">No. of Demo.</th><th rowspan="3">Area (ha)</th><th colspan="3">Yield (q/ha)</th><th rowspan="3">% Increase</th><th colspan="3">Economics of demonstration (Rs./ha)</th><th colspan="3">Economics of check (Rs./ha)</th></tr>
<tr><th colspan="3">Demo</th><th>Check</th><th rowspan="2">Gross Return</th><th rowspan="2">Net Return</th><th rowspan="2">BCR</th><th rowspan="2">Gross Return</th><th rowspan="2">Net Return</th><th rowspan="2">BCR</th></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>Plantation</td><td>Management of Spindle Bug and Bud Rot in Younger Arecanut Garden (2022-23)
• Spraying Thiomethaxam 25 WG @ 0.25 g / L
• Spraying Copper Oxy chloride 3 g/ L
• Placing 2 g Thiomethaxam 25 WG in Leaf whorl @ 2 sachets/ palm
• Placing 2 g Metalaxyl + mancozeb 75 WP in Leaf whorl @ 2 sachets/ palm</td><td>Hirehalli local</td><td>-</td><td>Perennial</td><td>10</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>In progress (Flowering stage)</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Plantation</td><td>Management of Rugose whitefly in coconut (2021-22)
• Use of Yellow Sticky Traps @25/ha
• Spraying Neem oil @ 0.5% (5 ml / L) + boiled Maida flour paste @ 25 g/L
• Spraying Entomopathogenic fungus Isaria fumosorosea @ 2X 10 8 spores /ml (5g/lL) – Two sprays at 15 days interval</td><td>-</td><td>-</td><td>Perennial</td><td>5</td><td>2</td><td colspan="11"><table>
<tr><th rowspan="2">Parameters</th><th colspan="4">Pre treatment</th><th colspan="4">Post treatment</th></tr>
<tr><th>White fly colony (No.)</th><th>Sooty mold incidence(%)</th><th>Predators (No.)</th><th>Parasitiztion (%)</th><th>White fly colony (No.)</th><th>Sooty mold incidence(%)</th><th>Predators (No.)</th><th>Parasitiztion (%)</th></tr>
<tr><td>Demo plot</td><td>11.5</td><td>45.3</td><td>0.5</td><td>34.5</td><td>8.5</td><td>35.5</td><td>0.4</td><td>63.5</td></tr>
<tr><td>Check plot</td><td>13.5</td><td>55.5</td><td>0.4</td><td>42.5</td><td>19.5</td><td>82.5</td><td>0.6</td><td>43.5</td></tr>
</table></td></tr>
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<table>
<tr><th rowspan="3">Crop</th><th rowspan="3">Name of the technology demonstrated</th><th rowspan="3">Variety</th><th rowspan="3">Hybrid</th><th rowspan="3">Farming situation</th><th rowspan="3">No. of Demo.</th><th rowspan="3">Area (ha)</th><th colspan="2">Yield (q/ha)</th><th rowspan="2">% Increase</th><th colspan="3">Economics of demonstration (Rs./ha)</th><th colspan="3">Economics of check (Rs./ha)</th></tr>
<tr><th>Demo</th><th>Check</th><th>Gross Return</th><th>Net Return</th><th>BCR</th><th>Gross Return</th><th>Net Return</th><th>BCR</th></tr>
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<tr><td>Plantation</td><td>Coconut : Value Addition, Branding and Market Linkage (2021-22)
Demonstration on preparation of coconut value added products i.e coconut burfi and coconut chips
Branding, packaging, labeling and market linkage of coconut value added products</td><td>-</td><td>-</td><td>Perennial</td><td>40</td><td>1 SHG</td><td colspan="10"><table><tr><th rowspan="2">Particulars</th><th colspan="4">Consumer acceptability</th></tr><tr><th colspan="2">Coconut chips</th><th colspan="2">Coconut burfi</th></tr><tr><th></th><th>No.</th><th>%</th><th>No.</th><th>%</th></tr><tr><td>Liked</td><td>40</td><td>80.00</td><td>45</td><td>90</td></tr><tr><td>Disliked</td><td>10</td><td>20.00</td><td>5</td><td>10</td></tr></table><table><tr><td>Employment generation</td><td>3 members</td></tr><tr><td>Market channels: organic farming markets, bhoomi network, Bangalore circus</td><td></td></tr><tr><td>Quantity produced</td><td>250 Kg</td></tr><tr><td>Average earning/member</td><td>Rs. 28000</td></tr><tr><td>No of days of employment</td><td>30 days</td></tr></table><table><tr><th>Particulars</th><th colspan="3">Coconut Value added products</th></tr><tr><th>Coconut value added products</th><th>Farmers practice (copra)</th><th>Coconut chips</th><th>Coconut burfi</th></tr><tr><td>Gross Cost (Rs/qtl)</td><td>7,000</td><td>22,000</td><td>17,000</td></tr><tr><td>Gross Returns (Rs/qtl)</td><td>15,300</td><td>70,000</td><td>51,000</td></tr><tr><td>Net Returns (Rs/qtl)</td><td>8,300</td><td>48,000</td><td>25,000</td></tr><tr><td>B:C Ratio</td><td>2.18</td><td>3.18</td><td>3.00</td></tr></table></td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Fibre</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Others (pl.specify)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
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Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
							Demo	Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Nutrition garden	**Nutrition security of farm families through nutrition garden(2021-22)** • Micronutrient deficiencies also referred to as 'Hidden Hunger' affects the health, learning ability as well as productivity owing to high rates of illness and disability contributing to malnutrition, underdevelopment and poverty. • Nutri garden is a multidimensional effort to reduce malnutrition.	-	-	Kharif / Rabi/ summer	30 family	30 family	*								

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*** Results of Nutrition security of farm families through nutrition garden (2021-22)**

Sl. No.	seeds		
	Kharif	Rabi	Summer
1	Bhendi	Carrot	Ridge gourd
2	Cowpea	Beans	Ash gourd
3	Carrot	Cluster beans	Bitter gourd
4	Knol khol	Amaranth	Cucumber
5	Onion	Radish	Pumpkin
6	Cluster beans	Palak	palak
7	Palak	Fenugreak	
8	Fenogreak	coriander	
Veg. seedlings		Tomato, Chilli, Brinjal	
Flower seedlings		Mari gold, Chrarysanthemum	
Medicinal and fruit Saplings		Papaya,star fruit, Brahimi,,, white hibiscus, lemon grass Doddapatre, Amruthballi, Lemon, Chakramuni, Guava goose berry, drum stick and Amla,	

After nutri garden demonstration effect of food adequacy in farm families

Food groups	Increase in adequacy (%)
Cereals (330 g)	4.39
Pulses (75 g)	2.63
Milk & its products (300 ml)	5.07
Other vegetables (200g)	7.58
Fruits (100g)	4.23

**** Results of Nutrition security of farm families through nutrition garden (2022-23)**

Sl. No.	seeds		
	Kharif	Rabi	Summer
1	Bhendi	Carrot	Ridge gourd
2	Cowpea	Beans	Ash gourd
3	Carrot	Cluster beans	Bitter gourd
4	Knol khol	Amaranth	Cucumber
5	Onion	Radish	Pumpkin
6	Cluster beans	Palak	palak
7	Palak	Fenugreak	
8	Fenogreak	coriander	
Veg. seedlings		Tomato, Chilli, Brinjal	
Flower seedlings		Mari gold, Chrarysanthemum	
Medicinal and fruit Saplings		Papaya,star fruit, Brahimi,,, white hibiscus, lemon grass Doddapatre, Amruthballi, Lemon, Chakramuni, Guava goose berry, drum stick and Amla,	

Crops of nutrition garden

Details	Kharif	Rabi	Summer	Total (Kgs)
Quantity of GLV Produced (Kg)	410	620	456	1,486
Quantity of other vegetables Produced (Kg)	912	1015	1039	2,966

Nutrition garden 30 farm family vegetable Gross cost

farm family	Gross cost (Rs./ year)		savings (Rs./ year)	Percentage savings (%)
	Before	after		
30 farm family	1,80,000	1,02,000	78000	43.33%
1 farm family	6000	3400	2600	

Anthropometric details of family members before and after intervention of the Nutri garden

Anthropometric details	Before		After	
	BMI	Per cent	BMI	Per cent
BMI <18.5 (Under weight)	17	15.59	14	12.84
BMI 18.5-22.9 (Normal)	42	38.53	51	46.78
BMI 23.0-24.9 (Over weight)	27	24.77	24	22.01
BMI 25.0-29.9 (Obese G-I)	18	16.51	16	14.67
BMI >29.9 (Obese G-II)	5	4.60	4	3.66
Total	109	100	109	100

Adequacy of Food Intake Before and after Nutri Garden

	RDA	Before		After		Per cent increase
	(g/ml)	Mean±SD	% adequacy	Mean±SD	% adequacy	
CEREALS	330 g	295.12±36.01	89.43	325.07±30.17	98.50	9.07
PULSES	75 g	50.13±11.04	66.84	59.05±9.97	78.73	11.89
MILK AND ITS PRODUCTS	300 ml	199.25±90.88	66.41	211.15±55.24	70.33	3.97
ROOTS AND TUBERS	200g	55.32±46.18	27.66	67.12±37.81	33.56	5.90
GLV	100g	85.32±29.73	85.32	99.75±28.09	99.75	14.43
OTHER VEGETABLES	200g	135.25±37.35	67.62	166.13±31.86	83.06	15.44
FRUITS	100g	52.23±9.25	52.23	67.35±25.58	67.35	15.02
SUGARS	30g	45.85±18.08	152.83	33.03±12.34	110.1	-42.73
FATS	25g	41.25±29.06	165.00	25.05±7.94	100.0	-65.00

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

FLD title	Data on other parameters in relation to technology demonstrated		
	Parameter with unit	Demo	Check
Intercropping of Hebbal avare in younger Arecanut garden (2021-22)	Plant height (cm)	58.94	Mono-crop
	No. of pickings	3 to 4	
	No. of pods/plant	102	
	Pod borer incidence (%)	11.14	
	Weed incidence (%)	20- 30	
Integrated nutrient management in Coconut (2021-22)	No. of functional leaves / palm	19	15
	No. of leaves drooped/ palm	3	7
	No. of bunch / palm / year	9	8
	Weed density (no./sq. mtr)	26	189
	No. of nuts/palm/year	80.40	66.50
Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2021-22)	Fruit weight (kg/fruit)	175.43	166.67
	Fruits / plant (No.)	567	475.80
	Fruit weight/ plant (kg)	94.50	79.30
	Fruit fly incidence (%)	2.1	7.6
Enhancement of productivity in Arecanut through nutrient Management (2021-22)	Single fresh nut wt.(g/nut)	32.4	29.1
	No. of nuts /bunch	214	192
	Avg. bunches/palm / year	3.4	2.9
	Nut splitting (%)	1.90	7.50
	Nut dropping (%)	1.80	6.70
Integrated Nutrient Management in Banana (Var. Puttabale) (2021-22)	Plant height (m)	2.35	2.42
	Bunch weight (kg)	11.33	9.70
	No. of nuts /bunch	171	142
	Sigatoka leaf spot disease (%)	6.20	18.50
	Panama wilt disease (%)	4.25	13.00
Demonstration of Finger millet variety KMR – 630 (2022-23)	Plant height (cm)	108.6	99.05
	No. of Tillers / plant	7.4	5.3
	No. of fingers / ear head	8.6	6.9
	Blast incidence %	7.8	12.22
Demonstration of Arka actino plus on growth and yield of brinjal (2022-23)	Plant height (cm)	89.94	79.44
	No. of branches /plant	7.60	6 .40
	No. of Fruits/plant	40.2	34.6
	Fruit and shoot borer incidence (%)	2.77	7.05
	Bacterial Wilt incidence (%)	1.50	3.00
	Avg Fruit wt (g)	46.18	37.14
	Fruit length (cm) at harvest	20.19	19.01
	yield / plant (kg)	2.73	2.30
Intercropping of Hebbal avare in younger Arecanut garden (2022-23)	Plant height (cm)	61.12	Mono-crop
	No. of pickings	3-4	
	No. of pods/plant	95	
	Pod borer incidence (%)	10.56	
	Weed incidence (%)	20-30	
Integrated Crop Management in Tomato (2022-23)	Plant height (cm)	78	72
	No. of fruits / plant	97	83
	Days taken for flowering	48	44
	Days taken for harvesting	77	72
	Leaf curling (%)	2.00	9.05
	Early & late Blight (%)	2.10	11.50

	Bacterial wilt (%)	1.10	7.00
Integrated Crop Management in chilli (2022-23)	Fruit length (cm)	8.4	9.0
	Fruit width (cm)	1.2	1.3
	Fruit weight / pl (g)	1205	1115
	No. of fruits / plant	199	170
	Leaf curl (%)	3.2	7.8
	Powdery mildew(%)	2.8	6.2
Enhancement of productivity in Arecanut through nutrient Management (2022-23)	Single fresh nut wt.(g/nut)	33.4	30.1
	No. of nuts /bunch	224	182
	Avg. bunches/palm / year	3.6	3.2
	Nut splitting (%)	1.90	7.50
	Nut dropping (%)	1.80	6.80
Demonstration of Foxtail Millet Variety DHFT 109-3 and it's Value Addition (2022-23)	Plant height / plant (cm)	98	82
	No. of fingers / plant (No.)	6	4
	No. of Tillers / plant (No.)	7	5
Demonstration of COFS-31 Fodder Crop as Inter Crop in Coconut Garden (2022-23)	Plant height (cm)	213	190.7
	Stem circumference	3.4	5.7
	No. of leaves	72.4	44.3
	yield (t/ha)	44.6 (2 cutting)	35.4 (2 cutting)
	Palatability (%)	90.12	82.6

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
Intercropping of Hebbal avare in younger Arecanut garden (2021-22)	Hebbal avare recorded 21.05 q/ha which increases additional income, decreases in weed menace and improved soil fertility status of Arecanut garden.	-
Integrated nutrient management in Coconut (2021-22)	Improved management practices increases the nut yield and fetches good price	-
Enhancement of productivity through ICM in Mango variety (Var. Alphanso) (2021-22)	Deduction in flower drop, pest and disease incidence controlled and improved yield	-
Enhancement of productivity in Arecanut through nutrient Management (2021-22)	Improved soil fertility status and improved yield	-
Integrated Nutrient Management in Banana (Var. Puttabale) (2021-22)	Improved soil fertility status, pest and disease incidence controlled and improved yield	-
Demonstration of Finger millet variety KMR – 630 (2022-23)	Using Finger millet variety KMR – 630 improved yield and reduced incidence of blast	
Demonstration of Arka actino plus on growth and yield of brinjal (2022-23)	Improved soil fertility and moisture status and improved yield	
Intercropping of Hebbal avare in younger Arecanut garden (2022-23)	Intercropping of Hebbal avare in younger Arecanut garden improves soil fertility and moisture status and improved yield	
Integrated Crop Management in Tomato (2022-23)	Demonstrated plot obtained higher yield with net return and less incidence of disease as compare to farmers practice	
Integrated Crop Management in chilli (2022-23)	ICM practices improves the overall performance of crop and resulted higher yield and net income	

Enhancement of productivity in Arecanut through nutrient Management (2022-23)	Improved soil fertility and moisture status and improved yield	-
Demonstration of Foxtail Millet Variety DHFT 109-3 and it's Value Addition (2022-23)	Value Addition obtained higher net return	-
Demonstration of COFS-31 Fodder Crop as Inter Crop in Coconut Garden (2022-23)	COFS-31 Fodder Crop as Inter Crop in Coconut Garden utilize space and fodder Crop better yield with Palatability	-

5.B.3. Livestock and related enterprises

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	**Integrated Approaches to Combat Anaemia in Dairy Cattle (2022-23)** • Importance of Phosphorus and Vitamins • Proper trace mineral supplementation for rejuvenation of RBC (Iron) • Importance of regular Deworming • Use of Animal lifter	Cross breed animals	10	10	animals (No.)	Hemoglobin Percentage (%)				67.70	134800	21500	1.19	70000	-41500	0.62
						11.2			6.8							
	Integrated approaches to combat Anestrus in dairy cattle (2022-23) • Hormonal Therapy (gonadotropin releasing hormone (GnRH) followed by prostaglandin and again followed by GnRH.) • Importance of Phosphorus and Vitamins • Importance of regular Deworming	Cross breed animals	10	10	animals (No.)	Fertility rate (%)				100	-	-	-	-	-	-
						100			0-20							
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**
Integrated Approaches to Combat Anaemia in Dairy Cattle (2022-23)	Disease Susceptibility (%)	0	65
	Recovery percentage (%)	80	10
	Mortality percentage (%)	0	30
Integrated approaches to combat Anestrus in dairy cattle (2022-23)	Artificial Inseminations/Conception rate (%)	2.2	8
	Success rate of Hormonal therapy (%)	100	0

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
Integrated Approaches to Combat Anaemia in Dairy Cattle (2022-23)	Improved of iron content RBC (Hemoglobin) and Deworming	
Integrated approaches to combat Anestrus in dairy cattle (2022-23)	Improved Fertility rate	

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	23	925	-
2	Farmers Training	24	185	
3	Media coverage	30		
4	Training for extension functionaries	2	32	
5	Others (Please specify) Method demo.	10	58	

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)			*Economics of check (Rs./ha)		
					Demo			Check		Gross 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 (Tomato)	**Integrated Crop Management in Tomato (2022-23)** • Use of high yield Hybrid -Arka Abedha multi disease resistant variety • Mulching with fertigation • Foliar spray of Vegetable special @ 5 g/L • Application of Neem cake & AMC • Plant Protection: fruit borer with Indoxicarb @ 0.3 ml/L water	Arka Abedha	15	3	660	625	654	510	28.24	309150	204150	2.94	243000	129500	2.14
Chilli	**Integrated Crop Management in chilli (2022-23)** • Use of high yield Hybrid –KBCH-1 • Foliar spray of Vegetable special @ 5g / liter • Spray of Planofix (0.02%) for control of flower drop • Need based Plant Protection Chemical	KBCH-1	10	2	288	239	286	226	26.54	369000	270500	3.74	303000	192700	2.75
Total															
Cucumber															
Tomato															
Brinjal															
Okra															
Onion															
Potato															
Field bean															
Others (pl.specify)															
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
Tomato	• Demonstrated plot obtained higher yield with net return and less incidence of disease as compare to farmers practice	-
Chilli	• ICM practices improves the overall performance of crop and resulted higher yield and net income	--

PART VII. TRAINING

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management										
Resource Conservation Technologies	1	31	13	11	7	7	14	38	20	58
Cropping Systems	2	65	20	85	15	12	27	80	32	112
Crop Diversification	1	35	18	53	11	7	18	46	25	71
Integrated Farming	2	69	23	92	18	9	27	87	32	119
Micro Irrigation/Irrigation										
Seed production	2	79	35	114	18	10	28	97	45	142
Nursery management										
Integrated Crop Management										
Soil and Water Conservation										
Integrated Nutrient Management										
Production of organic inputs										

Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	20	8	28	4	4	8	24	12	36
Off-season vegetables	1	18	12	30	5	3	8	23	15	38
Nursery raising	2	60	25	85	10	8	18	70	33	103
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	25	15	40	11	6	17	36	21	57
Others (pl.specify)										
b) Fruits										
Training and Pruning	1	23	10	30	4	5	9	27	15	42
Layout and Management of Orchards										
Cultivation of Fruit	1	20	3	23	4	2	6	24	5	29
Management of young plants/orchards	1	25	8	33	3	3	6	28	11	39
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	1	65	13	78	10	7	17	75	20	95
Balanced use of fertilizers										
Soil and water testing	1	80	10	90	15	10	25	95	20	115
Others (pl.specify)										
Livestock Production and Management										
Dairy Management	1	20	15	35	5	3	8	25	18	43
Poultry Management	3	63	29	92	18	7	25	81	36	117

Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	28	13	41	11	5	16	39	18	57
Animal Disease Management	2	40	12	52	13	3	16	53	15	68
Feed and Fodder technology	1	15	5	20	3	2	5	18	7	25
Production of quality animal products	1	20	5	25	10	3	13	30	8	38
Others (pl.specify)										
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	2	21	23	2	5	7	4	26	30
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	1	20	60	80	10	25	35	30	85	115
Processing and cooking										
Gender mainstreaming through SHGs	1	0	23	23	-	11	-	34	-	34
Storage loss minimization techniques	1	5	15	20	5	5	10	10	20	30
Value addition	2	-	60	60	-	15	15	-	75	75
Women empowerment	2	-	46	46	-	10	10	-	56	56
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems	1	85	-	85	15	-	15	100	-	100
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	1	13	-	13	2	-	2	15	-	15
Small scale processing and value addition										
Post Harvest Technology										

Others (pl.specify)										
Plant Protection										
Integrated Pest Management	1	20	3	23	3	-	3	23	3	26
Integrated Disease Management	1	23	4	27	5	1	6	28	5	33
Bio-control of pests and diseases	2	40	6	46	8	2	10	48	8	56
Production of bio control agents and bio pesticides	1	21	3	24	6	1	7	27	4	31
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	42	1030	533	1527	251	191	431	1315	690	2005

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	1	28	18	46	5	4	9	33	22	55
Crop Diversification	1	25	3	28	3	1	4	28	4	32
Integrated Farming	1	15	5	20	3	1	4	18	6	24
Micro Irrigation/Irrigation	1	18	3	21	5	1	6	23	4	27
Seed production	1	10	3	13	2	-	2	12	3	15
Nursery management	1	15	5	20	3	2	5	18	7	25
Integrated Crop Management	1	12	3	15	2	-	2	14	3	17
Soil and Water Conservation	1	25	5	30	5	5	10	30	10	40
Integrated Nutrient Management	1	30	3	33	10	4	14	40	7	47
Production of organic inputs										
Others (pl.specify)										
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop										
Off-season vegetables	2	30	12	42	10	5	15	40	17	57
Nursery raising	2	45	28	73	7	4	11	52	32	84
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	33	11	44	8	3	11	41	14	55
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	1	25	3	28	10	2	12	35	5	40
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	1	22	7	29	4	2	6	26	9	35
Nutrient use efficiency										
Balanced use of fertilizers										
Soil and water testing	1	53	13	66	5	2	7	58	15	73
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	2	2	26	28	1	1	2	3	27	30
Design and development of low/minimum cost diet	1	-	20	20	-	2	2	-	22	22
Designing and development for high nutrient efficiency diet	1	-	20	20	-	5	5	-	25	25
Minimization of nutrient loss in processing	2	4	32	36	2	7	9	6	39	45

Processing and cooking	3	2	59	61	-	15	15	2	74	76
Gender mainstreaming through SHGs										
Storage loss minimization techniques	2	1	28	29	2	7	9	3	35	38
Value addition	4	-	86	86	-	10	10	-	96	96
Women empowerment										
Location specific drudgery production										
Rural Crafts										
Women and child care										
Others (pl.specify)										
Agril. Engineering										
Farm machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl.specify)										
Plant Protection										
Integrated Pest Management	2	51	12	63	17	05	22	68	17	85
Integrated Disease Management	3	98	22	120	22	3	25	120	25	145
Bio-control of pests and diseases	2	25	2	27	6	1	7	31	3	34
Production of bio control agents and bio pesticides	3	101	7	108	18	5	23	119	12	131
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	58	670	436	1106	150	97	247	820	533	1353

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	1	23	2	25	6	-	6	29	2	31
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	2	125	5	130	18	2	20	143	7	150
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) friends on coconut tree	1	18	-	18	2	-	2	20	-	20
TOTAL	4	166	-	25	0	26	-	185	16	201

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										

Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL										

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

Area of training	No. of 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	1	-	41	41	-	8	8	41	8	49
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	3	26	29	-	11	11	3	37	40
Any other (pl.specify)										
Total	2	3	67	70	0	19	19	44	45	89

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	1	20	4	24	9	1	10	29	5	34
Integrated Pest Management										
Integrated Nutrient management	1	16	4	20	4	1	5	20	5	25
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	2	36	8	44	13	2	15	49	10	59

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	1	-	28	28	-	2	2	-	30	30
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) plant protection**	2	52	7	59	8	2	10	60	9	69
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	2	85	11	96	15	4	19	100	15	115
8.b.	Others (pl.specify)										
9.	**Livestock and fisheries**										
10	**Livestock production and management**	5	142	56	198	15	8	23	157	64	221
10.a.	Animal Nutrition Management										
10.b.	Animal Disease Management	1	30	8	38	5	5	10	35	13	48
10.c	Fisheries Nutrition										
10.d	Fisheries Management										
10.e.	Others (pl.specify)										
11.	**Home Science**										
11.a.	Household nutritional security	1	-	25	25	-	5	5	-	30	30
11.b.	Economic empowerment of women	1	-	20	20	-	10	10	-	30	30
11.c.	Drudgery reduction of women										
11.d.	Others (pl.specify)										
12	**Agricultural Extension**										
12.a.	CapacityBuilding and Group Dynamics	1	15	60	75	5	30	35	20	90	110
12.b.	Others (pl.specify) Horticulture	6	158	63	221	42	18	60	200	81	281
	Total	22	482	278	760	90	84	174	572	362	934

Details of sponsoring agencies involved

1. CDB, Bangalore
2. ICAR, ATARI, Bangalore
3. MANAGE, Hyderabad
4. Sanjivini, Bangalore
5. SDC, UAS, Bangalore

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

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture										
1.b.	Commercial fruit production										
1.c.	Commercial vegetable production										
1.d.	Integrated crop management										
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	1	20	3	23	1	1	2	21	4	25
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.	1	11	3	14	-	1	1	11	4	15
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	4	15	70	85	5	20	25	20	90	110
5.b.	Others (pl.specify)										
	Grand Total	6	46	76	122	6	22	28	52	98	150

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

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															
2.															

PART VIII – EXTENSION ACTIVITIES

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
Advisory Services	9260	8900	200	9100	240	120	360	11	10	21
Farmers visit to KVK	9262	7500	1100	8600	89	20	109	-	-	-
Lectures delivered as resource persons	138	1700	400	2100	240	115	355	300	57	357
Diagnostic visits	23	250	50	300	5	5	10	-	-	-
Field Day	23	610	59	859	30	20	50	15	7	22
Group meetings	29	290	100	390	90	40	130	3	2	5
Kisan Ghosthi	-	-	-	-	-	-	-	-	-	-
Film Show	16	600	106	706	20	30	50	-	-	-
Self Help Group Conveners meetings	12	74	206	280	10	26	36	1	3	4
Mahila Mandals Conveners meetings	4	-	107	107	-	14	14	--	4	4
Kisan Mela	-	-	-	-	-	-	-	-	-	-
Exhibition	5	1050	240	1290	110	40	150	30	20	50
Scientific visit to farmers field	190	513	211	734	40	35	75	10	5	15
Soil health Camp	1	67	13	80	10	-	10	6	-	6
Animal Health Camp	1	100	20	120	35	35	70	-	-	-
plant health camps	-	-	-	-	-	-	-	-	-	-
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-
Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-
farmer sammelans	17	280	35	315	29	11	40	13	2	15
workshops	4	142	28	170	16	2	18	2	0	2
Method Demonstrations	21	617	293	910	120	61	181	3	2	5
Celebration of important days (specify)	12	617	293	910	164	54	218	19	12	31
special day celebration	6	180	42	222	28	18	46	8	7	15
Exposure visit	21	250	35	285	18	22	40	28	22	50
Others, specify	-	-	-	-	-	-	-	-	-	-
RSK visit	30	70	50	130	20	30	50			
Total	**19075**	**23810**	**3588**	**27608**	**1314**	**698**	**2012**	**449**	**153**	**602**

8.2 Other extension activities like print and electronic media etc.

Sl. No.	Type of media/activity	Number of activities/Number
1	Popular articles	-
2	Newspaper coverage	51
3	Extension Literature	16
4	Radio Talks	1
5	TV Talks	11

6	CD/DVD/Video clips	45
7	Animal health camps (no. of animal treated)	350
8	Others, please specify	-
	Total	**453**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIAL

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)					
Saame	Saame	-	100 kg	4000	8
Oilseeds					
Pulses					
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others (specify)					
Total					

9.B. Production of hybrid seeds by the KVKs: Nil

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

9.C. Production of planting material by the KVKs

Crop category	Name of the crop	Variety	Number	Value (Rs.)	Number of farmers to whom provided
Commercial					
Vegetable seedlings	Drumsick	-	836	8360	35
Fruits	Papaya	-	345	6900	22
	cashew	-	6	240	1
Ornamental plants					
Medicinal and Aromatic					
Plantation	Arecanut	-	2822	107280	110
	Coconut	-	265	32600	55
Spices					
Tuber					
Fodder crop saplings					
Forest Species					
Others(specify)					
Amla	Amla	-	13	390	2
Gasagase	Gasagase	-	16	320	3
Tulasi	Tulasi	-	8	160	2
Karonda	Karonda	-	22	440	10
Total					

Sale of fruits

Crop category	Name of the crop	Variety	Value (Rs.)
Fruits	Mango	Badami, Rasapuru, Mallika, Malagova, Beneshan, sinduri	51000
	Cashew	-	22000
	Sapota	Cricket ball, kalipatti, DSH-2	6000
	Guava	Lacknow	2000
	Clustered apple	-	2125
	Jack fruit	-	600
Total			**83,725**

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

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

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (q)	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (specify)				
Vermicompost	Vermicompost	978 kg	13,705	55
Total				

9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows – milk	-	3670.4 liters	1,02,730	50
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total		3670.4 liters	1,02,730	50

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

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

(i) KVK Newsletter: Nil
Date of start: - Periodicity: - Copies printed in each issue:-

(ii) Summary of Literature developed/published

Item	Number
Research papers- International	
Research papers- National	
Technical reports	3
Technical bulletins	
Popular articles - English	
Popular articles – Local language	
Extension literature	9
Others if any Trg. manual	4

(iii) Details of Literature developed/published

1. Research articles in journals: Complete citation indicating authors, year of publication, title of publication, journal name, volume and page number in sequence.:Nil

2. Technical Reports/ bulletins: Authors name, Title of the technical report, name of publishing KVK, number of pages.

   All Staff, (2022) 15th SAC report, Krishi Vigyan Kendra, Tumakuru, 66p.
   All staff (2022) Annual Report- 2022, Krishi Vigyan Kendra, Tumakuru, 153p.
   All staff (2022) Action Plan report- 2022-23, Krishi Vigyan Kendra, Tumakuru, 58p.

3. Popular articles: Authors name, Title of the article, date of publication, Name of the newspaper/magazine, page no.: Nil

   -

4. Extension literature; Authors name, month and year of publication, Title of extension literature like folders, pamphlets etc., name of publishing KVK, number of pages.

Folders

1. V. GOVINDA GOWDA, ROOPA B PATIL, DARSHAN, M. E., ARJUMAN BANU, SRINIVASA, K. R. AND ANITHA, M. S., 2022, Haalina moulya vardita utpannagalu haagu upayogagalu, Krishi Vigyan Kendra, Konehalli, Tiptur
2. DARSHAN, M. E., GOVINDA GOWDA, V., NAGAPPA DESAI, ROOPA B PATIL, ARJUMAN BANU AND PADMANABHAN, 2022, Perala beleya sudharita utpaadana tantrikategalu, Krishi Vigyan Kendra, Konehalli, Tiptur
3. DARSHAN, M. E., GOVINDA GOWDA, V., NAGAPPA DESAI, ROOPA B PATIL, ARJUMAN BANU AND PADMANABHAN, 2022, Urali beleya sudharita utpaadana tantrikategalu, Krishi Vigyan Kendra, Konehalli, Tiptur
4. DARSHAN, M. E., GOVINDA GOWDA, V., NAGAPPA DESAI, ROOPA B PATIL, ARJUMAN BANU AND PADMANABHAN, 2022, Alasandi beleya sudharita besaya kramagalu, Krishi Vigyan Kendra, Konehalli, Tiptur
5. GOVINDA GOWDA, V., O. R. NATARAJU, DARSHAN, M. E., ANAND MANEGAR AND ARJUMAN BANU, 2022, Hainu raasugala samagra roga nirvahana kramagalu, Krishi Vigyan Kendra, Konehalli, Tiptur
6. GOVINDA GOWDA, V., DARSHAN, M. E., ARJUMAN BANU, PADMANABHAN, M. AND CHETHAN, M. S., 2022, Hainurasugalige sudharita mevina belegalu, Krishi Vigyan Kendra, Konehalli, Tiptur
7. DARSHAN, M. E., V. GOVINDA GOWDA, MANOJ, H., TASMIYA KOWSER, PADMANABHAN, M., NITHYASHREE, K. AND SATISHA, H, S., 2023, Nugge yalli Samagra Bele nirvahane, Krishi Vigyan Kendra, Konehalli, Tiptur
8. GOVINDA GOWDA, V., MANOJ, H., TASMIYA KOWSER, DARSHAN, M. E. AND PADMANABHAN, M., 2023, Tengu Beleya Samagra Keeta Haagu Roga Nirvahane, Krishi Vigyan Kendra, Konehalli, Tiptur
9. ROOPA B PATIL, GOVINDA GOWDA, V., NAGAPPA DESAI, ARJUMAN BANU, DARSHAN, M. E. AND PADMANABHAN, M., 2022, Tarakari Mattu Hannina Belegala Samshkarane Mathu Moulya Vardhane, Krishi Vigyan Kendra, Konehalli, Tiptur

Training manual

1. V. GOVINDA GOWDA, SRINIVASA, K. R., NAGAPPA DESAI, ROOPA B PATIL, ANITHA, M. S, DARSHAN, M. E. AND ARJUMAN BANU, 2022, Indan Ulitaya Haagu Neeru Samrakshana Kramagalu, Krishi Vigyan Kendra, Konehalli, Tiptur.

2. ROOPA B PATIL, V, GOVINDA GOWDA, ARJUMAN BANU, DARSHAN, M. E., NAGAPPA DESAI AND PADMANABHAN, M. 2022, tengu mattu siri danyagala utpaadane, samskarane mattu moulyavardhane, Krishi Vigyan Kendra, Konehalli, Tiptur.

3. V. GOVINDA GOWDA, O. R. NATARAJU, ANAND MANEGAR, DARSHAN, M.E., ARJUMAN BANU, SRINIVASA, K.R., ROOPA B PATIL AND ANITHA, M. S., 2022, VAIJNANIKA HAINURASUGALA SAAKANIKE MATHU NIRVAHANE, Krishi Vigyan Kendra, Konehalli, Tiptur

4. SYED MAKAR ALI, V. GOVINDA GOWDA, ARJUMAN BANU, DARSHAN, M. E., NAGAPPA DESAI, ROOPA B PATIL, ANITHA, M. S., SRINIVASA, K. R. AND M. PADMANABHAN, 2022, KRUSHI UPAKARANAGALA DURASTI MATTU NIRVAHANE, Krishi Vigyan Kendra, Konehalli, Tiptur

10.B. Details of Electronic Media Produced

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

5	Instagram account name	-	
6	Others if any	-	

10.C. Success Stories / Case studies, if any (two/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. Ginger (*Zingiber officinale*) is an important spice crop cultivated in tropical region. In Tumkur district it was grown in parts of the village, But major yield loss due to disease mainly such as rhizome rot. ICAR – Krishi vigyan Kendra, Konehalli, Tiptur conducted frontline demonstrations at ginger rhizome rot at farmers field during the year 2022-23. The main objective of frontline demonstration is to demonstrate the disease incidence was reduced by taking plant protection measure during the crop production. i.e. application of copper oxychloride and Trichoderma and lime can reduce the incidence of the disease at 60% at right timing. The farmer from umesh, gyaraghatta he has adopted all the method and reduce the disease incidence.



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

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

Background: The frontline demonstrations were conducted on integrated crop management (ICM) in green chilli at farmer's field of Mr. Ramesh S. during the year 2016-17. Mr. Ramesh S. is a progressive farmers of Karikere village, aged 44 year having regular attending training programme, Krishimela, group discussion, meeting organised/ conducted by KVK, Konehalli and Dept. of Horticulture. He is also growing various vegetables like tomato, brinjal, chilli but was getting very low yield and low income.

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

Particulars	Frontline demonstration (Demonstrated package)	Farmers practice (Local check)
Selection of variety /hybrid	Arka Meghana – Hybrid variety, tolerance to sucking pest and viral disease	Local or unknown private variety, no information
Seed treatment	Seed treated with fungicide Carbendizim	Not followed
Pro-tray method of raising the seedling in the nursery	Pro-tray method of raised seedling in shadenet house with Nylon mesh and selected good quality seedling	Pro-tray method of raised seedling in shadenet house and selected unknown poor quality seedling
Spacing	75 cm x 45 cm	75 cm x 60 cm
Application of farm yard manure	Applied 25 t/ha FYM before 3 week of transplanting	Applied 3 tractor load FYM (4-5 t/tractor load) during ridges and furrow preparation (2-3 day before transplanting)
Application of recommended dose of fertilizers	150 kg N + 75 kg P_2O_5 + 75 kg K_2O per ha (50 % NPK at the time of transplanting and remaining 50 % NPK applied at 6 week after planting)	After transplanting, applied 17:17:17 NPK + 20:20:0 NPK mixed chemical fertilizer (Approx. 10-12 g/plant) 3 – 4 times during crop period
Irrigation	Drip or furrow method of irrigation once in 3-5 days depend upon soil condition	Furrow method of irrigation once/twice in a week
Weed management	Pre-emergence herbicide - Butachlor @1.5 L/ha and hand weeding	Hand weeding 3 to 4 times
Use of growth regulator for control of flower drops	Sprayed with 50 ppm NAA (Planofix)	Not followed
Plant protection measures to	Need based application for control: Aphids and Thrips –	Not followed, irrespective of disease and pest,

Particulars	Frontline demonstration (Demonstrated package)	Farmers practice (Local check)
control pest and diseases	Sprayed Diamethoate (30 EC) @1.7 ml/L of water. Spayed Dicofol @ 2.5 ml/L of water at 7th and 11th week after transplanting for control of mites. Control of powdery mildew - Hexaconazol @ 0.5ml/L of water. Fruit rot – Carbondizim @ 1 g/L of water. Leaf curling – Imidaclopride @ 0.3 ml/L of water.	used plant protection chemical combined together with growth regulator without knowing compatibility of chemicals and not identified pest and disease for spraying.
Harvesting	Manual	Manual
Yield of Green chilli	23.75 t/ha	18.50 t/ha

Impact of ICM on yield of green chilli:

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

Yield of green chilli before and after frontline demonstration

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

Economics of green chilli production:

The economic impact of demonstrated production practices of green chilli was worked out by calculating total cost of cultivation, gross return, net return and B:C ratio (BCR) of before and after frontline demonstrated plot. Total cost of cultivation was calculated by total sum of expenditure of land preparation, seed, manure and fertilizers, weeding, plant protection measures, irrigation, labour component and harvesting. The data revealed that yield of green chilli was obtained 18.50 t/ha before FLD and 23.75 t/ha after FLD. The farmers sold green chilli Rs. 1000 per quintal at farmer field and

base on that profitability was calculated. Which shows that net returns Rs. 1,06,500/ha from green chilli before FLD, while the net returns Rs. 1,55,940/ha from green chilli after FLD. The B:C ratio for before FLD was 2.36, which was increased to 2.91 after FLD. It was evident from the results that B:C ratio of green chilli in FLD was higher than before FLD. This might be due to higher adoption of all the package of practices recommended for green chilli production in the region. However, increase in B:C ratio after FLD plot was due to adoption of production technology from 66.33 per cent to 93.33 per cent. This might be due to good extension contact by FLD farmers with the scientist and extension workers.

Economics of green chilli production before and after frontline demonstration

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

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

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

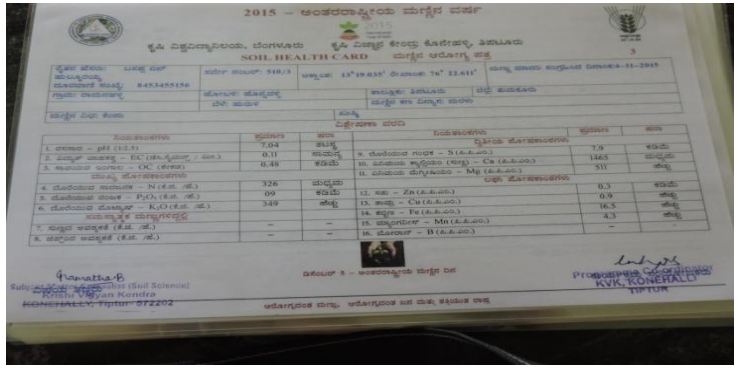
Background: Soil is the basis for food, feed, fuel and fiber production and for services to ecosystems and human well being. It is the reservoir for at least a quarter of global biodiversity and therefore requires the same attention as above ground biodiversity. The International Union of Soil sciences(IUSS) in 2002, made a resolution proposing the 5th December as ' world soil day' to celebrate the importance of soil as a critical importance in our lives.

Government of India has also gave more importance to soil and its management and come out with Soil Health Card Mission on 17th February, 2015 to issue Soil Health Cards to all the farmers of the Country to focus on management of soil health.

Technology Intervention: On the Occasion of International soil day on 5th December 2016, KVK has issued 289 Soil Health Cards after analysis of major and micro- nutrients based on the grid of 2.5 ha for irrigated and 10 ha for rainfed areas to S. Ramanahalli, Patrehalli and Lakkihalli villages (Honnavalli Cluster) of Tiptur taluk, Tumkur district. GPS readings and other general details of farmers are collected from each and every farm holdings in that grid area. Soil was analyzed for both major and micro nutrients at KVK Laboratory by using standard procedures. Samples were analyzed for pH, electrical conductivity, organic carbon status, available nitrogen, phosphorous and potash in KVK, Konehalli and secondary & micro nutrients were analyzed at KVK Hirehalli. Soil health cards were issued with soil test based fertilizer recommendations to their proposed crops.

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

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



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

Background: Smt T.B. Parvatamma w/o Siddaramaiah aged 46 years from Eralager village, Kibbanahallihobli of Tiptur taluk hails from an agricultural family. Her family owns 5ac area of dry land which is the main source of livelihood. Agricultural income was not stable (Rs 10,000 to Rs 30,000/ annum) and it was not sufficient enough to meet the family needs. Parvatamma is a SHG member of Nandini SHG group of that village. She regularly attends the programmes of women and child welfare department, KVK, agriculture department etc. Once she attended the Training programme organized by KVK, Konehalli for SHG members on value added products from agricultural enterprise and entrepreneurship development programmes. She was very

active in training programme on Tamarind and its value added products as she is having 30 tamarind trees, She came forward to do processing and preparation of value added products of tamarind. With this background, KVK Konehalli conducted Front line demonstration on Processing and branding of Tamarind value added products during 2014-15 to enhance the knowledge, skill and income of the farm women.

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

Training and method demonstration were conducted on preparation of 1 Kg and ½ Kg tamarind slabs and value added products like chigali and toffee then her products were registered under FSSAI. Labels were also developed further the demonstration was also given on ordeaux and packaging.

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

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

Impact of FLD on Economics of Tamarind Value added products

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

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

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

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

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

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

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

Interventions:

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

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

Impact:

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

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

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

10.E. Give details of Indigenous 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
1	Paddy/Ragi	Seedlings were transplanted equi distance at spacing of 22.5 x 22.5cm	It facilitates intercultivation in both directions, conserves moisture, controls weeds and enhance tillering	-
2	Ragi	Sowing seeds mixed with FYM	It ensures better moisture and nutrient supply and reduces seed rate and finally lesser cost of production	-
4	Coconut	Application of common salt Planting cactus near tree	Cost effective substitute for potash and also acts as on insect repellent To control stem bleeding	-
5	Arecanut	Application of Tank silt @ 50ton/ha	Supply nutrient to crop	-
6	Paddy	Calotropies(yekka) branches are placed at the water inlet	Acts as a insect repellent	-
7	Coconut	Root feeding with neem oil	Reduce stem bleeding	-
8	Coconut	Planting kalli plants at the base	Reduce stem bleeding	-

		of coconut palm		
9	Perennial crops	Rag husk, coconut fronds and husk are used as mulch	Check evaporation and weed growth	-
10	Redgram	Redgram is mixed with castor oil and stored in earthen vessel	Physical barrier to pests	-
11	Vegetable garden	Maize is grown around vegetable garden	Physical barrier to cattle and acts as a trap crop for insects	-

10 F. Technology Week celebration: Nil

Period of observing Technology Week: From to
Total number of farmers visited :
Total number of agencies involved :
Number of demonstrations visited by the farmers within KVK campus :

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)			
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week			

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

Krishi Vigyan Kendra, Tiptur, Tumkur district has been awarded with **NATIONAL SIRIDHANYA AWARDS-2023** under the category as Best Institution for Millet Production through Teaching, Research and Extension during International Trade Fair on Millets and Organics-2023 organized at Bangalore on 20-22 January 2023.

PART XI – SOIL AND WATER TEST

11.1 Soil and Water Testing Laboratory

A. Status of establishment of Lab **:** Good

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

Sl. No	Name of the Equipment	Qty. (No.)	Cost (Rs.)	Status
1	pH meter	02	43550	Good
2	Conductivity bridge	01	7400	Good
3	Physical Balance	01	12,000	Good
4	Chemical Balance	01	48,900	Good
5	Magnetic stirrer with Hot Plate	01	5500	Good
6	Shaker with DC Motor	01	27,600	Good
7	Hot Air Oven	01	20,000	Good
8	Water Distillation Still	01	48,850	Good
9	Spectrophotometer	01	46,200	Good
10	Flame Photometer	01	38,720	Good
11	Kjeldahl Digestion and Distillation Setup	01	1,67,709	Good
12	LG Refrigerator with Stabilizer and Stand	01	15,970	Good
13	Kanchan Mixer Grinder	01	1800	Good
14	Pusa Digital STFR meter Kit	01	53,400	Good
15	Digital electrical conductivity meter	01	15,845	Good

16	Epson L655 ink tank printer	01	29568	Good
17	Dell inspiron computer	01	59708	Good
18	Electronic balance	01	46080	Good
19	Double distillation Unit	01	94663	Good
20	Double beam Automatic absorption spectrophotometer (AAS)	01	2195540	Good
21	Water softner	01	15600	Good
22	Computer, laptop and other accessories	01	180000	Good
23	Visible spectrophotometer	01	97,940	Good
24	PC link software for spectrophotometer	01	49,560	Good
25	Micro controller based flame photometer	01	64900	Good
	Total		32,19,294	

B. Details of samples analyzed since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	9518	9134	3123
Water Samples	7927	7612	2511
Plant samples	-	-	-
Manure samples	-	-	-
Others (specify)			
Total	**17445**	**16746**	**5634**

C. Details of samples analyzed during 2022:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages
Soil Samples	261	240	210
Water Samples	132	124	110
Plant samples	-	-	-
Manure samples	-	-	-
Others (specify)	-	-	-
Total	**393**	**364**	**320**

11.2 Mobile Soil Testing Kit

A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status

1.	28.03.2017	Not analyzing due to unavailability of related chemicals

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

	During 2021	During 2022	Cumulative progress (Total)
Samples analyzed (No.)	168	100	268
Farmers benefited (No.)	125	98	223
Villages covered (No.)	15	13	28

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

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	-	210	240	261	261
Mobile Soil Testing Kit	-	13	98	100	100

11.4 World Soil Health Day celebration

Sl. No.	Farmers participated (No.)	Soil health cards issued (No.)	VIPs (MP/ Minister/MLA attended (No.)	Other Public Representatives participated	Officials participated (No.)	Media coverage (No.)
1	**70**	**20**	**-**	**-**	**2**	

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)
Integrated crop management in green Chilli (*Capsicum annuum* L.)	10	75	1,06,500	1,55,940
			B:C - 2.36	B:C - 2.91
Integrated crop management in Tomato	20	80	1,44,620	2,20,480
			2.37	3.15

Assessment of Soil test based nutrient recommendations adopted by farmers of cluster villages of Tiptur Taluk, Tumkur district	289	60	Farmers were experienced decrease in cost of cultivation by 10-15% and increased crop yield by 15-20 %.	
Community based Monitoring and management of Red palm weevil and Rhinoceros beetle in coconut through pheromone traps	995	92	Trapping and destruction of rhinoceros beetle through pheromone traps resulted in the reduction of leaf and spindle damage by 22.5 and 55, respectively. Use of pheromone trap for red palm weevil was found to effectively reduce the palm damage by 65% and 78% dead palms.	
Processing and Branding of Tamarind Value added products	2	40	1.000	5.200
			B:C - 1.25	B:C - 2.08

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)

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

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

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

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

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

Pheromone technology demonstrated

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

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

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

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

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

PART XIII - LINKAGES

13A. Functional linkage with different organizations

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

13B. Details of linkage with ATMA

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	Taluk and district level technical advisory committee	4	-	-

02	**Research projects**	-	-	-	-
		-	-	-	-
03	**Training programmes**	Improved production particles in field and horticulture crops	6	2	-
04	**Demonstrations**	Seed treatment, IPDM etc.	7	3	-
		-	-	-	-
05	**Extension Programmes**	-	5	2	-
	Kisan Mela	-	-	-	-
	Technology Week	-	-	-	-
	Exposure visit	-	-	-	-
	Exhibition	World soil day	3	1	-
	Soil health camps	Animal health camps	3	2	-
	Animal Health Campaigns	-	-	-	-
	Others (Pl. specify)	-	-	-	-
06	**Publications**	-	-	-	-
	Video Films	-	-	-	-
	Books	Improved production particles in field and horticulture crops			Distributed to department and farmers
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	**Other Activities** (Pl.specify)	-	-	-	-
	Watershed approach	-	-	-	-
	Integrated Farm Development	-	-	-	-
	Agri-preneurs development				

13C. List of special programmes undertaken by the KVK which have been financed by State Government/National Horticultural Mission/ RKVY/ National Fisheries Development Board/Other Agencies

S. No.	Programme	Nature of linkage	Funds received in Rs.	Expenditure during the reporting period in Rs.	Remarks
1	NMSA- National mission for sustainable agriculture	GOK	40,00,000	40,00,000	-
2	Village Adoption Programme	UAS, Bangalore	2,00,000	2,00,000	-
3	ASCI Training programme	ICAR, ATARI, Zone XI, Bangalore	3,60,000	3,60,000	-

4	PKVY	ICAR, ATARI, Zone XI, Bangalore	3,30,000	3,30,000	-
5	NFSM	ICAR, ATARI, Zone XI, Bangalore	1,80,000	1,80,000	-

13D. Kisan Mobile Advisory Services

Month	No of Advisories	No. of Text messages sent	No. of voice messages sent	SMS/voice calls sent (No.)						Total SMS/Voice calls sent (No.)	Farmers benefitted (No.)
				Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
January	1	Text	1	0	0	0	0	0	1	20350	20350
February	1	Text	1	0	0	0	0	0	1	20350	20350
March	2	Text	2	0	0	0	0	0	2	20350	20350
April	3	Text	3	0	0	0	0	0	3	20350	20350
May	3	Text	3	0	0	0	0	0	3	20350	20350
June	3	Text	3	3	0	0	0	0	0	20350	20350
July	3	Text	3	2	0	0	0	1	0	20350	20350
August	2	Text	2	1	0	0	1	0	0	20350	20350
September	2	Text	2	1	0	0	0	1	0	20350	20350
October	3	Text	3	2	0	0	1	0	0	20650	20650
November	2	Text	2	1	0	0	0	1	0	20750	20750
December	1	Text	1	0	0	1	0	0	0	20850	20850
Total	**26**		**26**	**10**	**0**	**1**	**2**	**3**	**10**	**20850**	**20850**

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	
			6						

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	
Cereals									
					Saame	100 kg	-	4000	-
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
					Arecanut (seedlings)	2822		107280	
					Coconut (seedlings)	265		32600	
Floriculture									
Fruits					Papaya (seedlings)	345		6900	
					cashew (seedlings)	6		240	
Vegetables					Drumsick (seedlings)	836		8360	
Others (specify)									
					Amla (seedlings)	13		390	
					Gasagase (seedlings)	16		320	
					Tulasi (seedlings)	8		160	
					Karonda (seedlings)	22		440	
Sale of fruits				Badami, Rasapuru,	Mango			51000	

				Mallika, Malagova, Beneshan, sinduri					
				-	Cashew			22000	
				Cricket ball, kalipatti, DSH-2	Sapota			6000	
				Lacknow	Guava			2000	
					Clustered apple			2125	
					Jack fruit			600	

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	
1	Vermicompost	978 kg	-	13705	

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	cow	-	milk	3670.4 liters	-	102730	-

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	3	10	
February	2	10	
March	2	10	
April	1	5	
May	1	5	
June	1	5	
July	2	16	
August	2	11	

September	2	3	
October	1	21	
November	3	13	
December	3	12	

14F. Database management

Sl. No.	Database target	Database created
1. official letters	340	360
2. Technical reports	30	35

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

(a) Rain Water Harvesting Structure

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

(b) Micro-irrigation systems

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

PART XV – SPECIAL PROGRAMMES

15.1 Paramparagath Krishi Vikas Yojana (PKVY): Nil

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	104	22,000	22,000	25	769

15.3 Fertilizer awareness programmeorganised: Nil

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

15.4 Seed Hub: Nil

Crops	*Variety*	*Year of release*	*Production*				*No of farmers benefited/Sold to no. of farmers*	*Quantity seed sold (q)*
			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.)**
1	Castor	Demo: ICH- 66 Check : DCH – 177	10	25	10	25
Total			**10**	**25**	**10**	**25**

15.6 CFLDs on Pulses:

Sl. No.	**Crop**	**Varieties demonstrated and check**	**Allocated**		**Implemented**	
			Area (ha)	**Demos (No.)**	**Area (ha)**	**Demos (No.)**
1.	Redgram	Demo: BRG - 4	40	100	40	100
Total			**40**	**100**	**40**	**100**

15.7 Krishi Kalyan Abhiyan (Aspirational districts): Nil

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: Nil

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

15.9 Tribal Sub-Plan (TSP): Nil

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: Nil

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 : Nil

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)		
FLDs – Bio-fortified Crops (activity in no. of Unit)		
FLDs – Value addition(activity in no. of Unit/Enterprise)		
FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
Trainings		
Extension Activities		

15.12 KVK Portal

No. of Events added by KVKs	No. of Facilities added by KVKs	Filled Report on Package of Practices (Y/N)				Filled Profile Report (Y/N)							
		Crop	Livestock	Fisheries	Horticulture	Employees	Posts	Finance	Soil Health Cards	Appliances	Crops	Resources	Fish
330	09	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N

15.13 KSHAMTA : Nil

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	Kunigal Tq	Shettikere	1	663000	Ragi, Paddy, Coconut, Areca nut	Areca nut + Pepper intercropping	1499000	2021000
2	Tumakuru	Kunigal Tq	Gunnagere	1	282800	Finger millet, Paddy , Coconut , Arecanut ,Poultry birds	New technologies	379600	591600
3	Tumakuru	Kunigal Tq	Ippadi	1	687875	Sericulture, Coconut, Mango, Sheep	New technologies	1151000	1733500
4	Tumakuru	Turuvekere	Kurubara halli,	1	2,012,000	Coconut, Areca nut , Banana, VCO	New technologies	1,669,000	3,205,000
5	Tumakuru	Turuvekere	Melinavalagerehalli	1	4,40,375	Finger millet, Redgram, Coconut+ banana, Arecanut+ beans, Jersy-HF	New technologies	6,84,425	8,31,425
6	Tumakuru	Tiptur	Vithalapura	1	1,20,320	Finger millet, Red gram, Coconut, Cows (HF)	New technologies	1,66,600	2,17,650
7	Tumakuru	Gubbi	Belavatha	1	2,82,000	Finger millet, Paddy ,Coconut, Arecanut, Tomato and Beans, Cows (HF)	New	4,18,000	5,50,360

							technologies		
8	Tumakuru	Tiptur	Vithalapura	1	1,72,800	Finger millet, Red gram, Castor, Vegetables& GLV, Coconut, Cow (HF), Korle value addition	New technologies	2,72,000	3,33,500
9	Tumakuru	Gubbi	Muganahunse	1	1,92,000	Green gram, Redgram, Cowpea, Mango, Coconut , Baffalo ,Cow, Intercrop with Coconut+ Cowpea , Inter Crop Mango + Green gram	New technologies	2,48,000	3,98,200
10	Tumakuru	Kunigal Tq	Gunnagere	1	329650	Finger millet, Coconut , Arecanut	New technologies	592000	739400
11	Tumakuru	Tiptur	Karikere	1	3,35,400	Ragi, Green gram, Redgram, Areca nut, Coconut, Baffalo	New technologies	475000	741000
12	Tumakuru	Tiptur	Chikkahonnavalli	1	299800	Ragi, Green gram, Redgram, Areca nut, Coconut	New technologies	406000	513180
13	Tumakuru	Gubbi	Belavatha	1	341000	Finger millet, Paddy ,Coconut, Arecanut, Tomato	New technologies	309000	406040
14	Tumakuru	Gubbi	Belavatha	1	13,72,000	Finger millet, Coconut , Arecanut , Cow (HF),	New technologies	8,92,880	12,92,880
15	Tumakuru	Tiptur	Gowdanakatte	1	9,43,670	Finger millet, Pegion pea, Coconut, Arecanut, Banana, Cows, Buffaloes	New technologies	14,29,920	17,47,920

PART XVI - FARMERS FEEDBACK ON ASSESSED/DEMONSTRATED TECHNOLOGIES OF CROPS / LIVESTOCK

16.1 Farmers feedback on performance of crop varieties/hybrids

Sl. No.	Crop varieties/hybrids assessed/ demonstrated	Farmer's feedback

16.2 Farmers feedback on performance of agronomic practices

Sl. No.	Agronomic practices	Farmer's feedback

16.3 Farmers feedback onperformance of pest and disease management in crops

Sl. No.	Pest and disease management in crops	Farmer's feedback

16.4 Farmers feedback onperformance of farm machinery technologies

Sl. No.	Farm machinery technologies	Farmer's feedback

16.5 Farmers feedback onperformance of livestock and fisheries technologies

Sl. No.	Livestock/fisheries technologies	Farmer's feedback

PART XVII - FINANCIAL PERFORMANCE

17A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute (ICAR)	Canara Bank	Tiptur	699	SB	0699101022252	572015202	CNRB0000699
With KVK (Revolving fund)	Canara Bank	Tiptur	699	SB	0699101025795	572015202	CNRB0000699
DAESI	Canara Bank	Tiptur	699	SB	0699101037387	572015202	CNRB0000699

17B. Utilization of KVK funds during the year 2022-23 (01 January, 2022 TO 31 December, 2022) (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	144.60	144.60	144.60
2	**Traveling allowances**	2.00	2.00	2.00
3				
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.23	2.23	2.23
B	POL, repair of vehicles, tractor and equipments	2.00	2.00	2.00
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.50	1.50	1.50
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	1.50	1.50	1.50
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	6.50	6.50	6.50
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.95	0.95	0.95
G	Training of extension functionaries	0.50	0.50	0.50
H	Extension activities	1.61	1.61	1.61
I	FFS	0.00	0.00	0.00
J	EDP	0.45	0.45	0.45
k	Soil, Plant & Water Testing Laboratory	1.00	1.00	1.00
l	Maintenance of buildings	1.50	1.50	1.50
m	Nutrigarden	0.26	0.26	0.26
n	conference on extension	0.00	0.00	0.00
o	Library	0.50	0.50	0.50
TOTAL (A)		**20.50**	**20.50**	**20.50**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Vehicle** (Four wheeler/Two wheeler, please specify)	-	-	-
3	**Information technology**	3.00	3.00	3.00

4	**SCSP programme**	2.65	2.65	2.65
TOTAL (B)		**5.65**	**5.65**	**5.65**
C. REVOLVING FUND		-		-
GRAND TOTAL (A+B+C)		**172.75**	**172.75**	**172.75**

17C. 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 31st December of each year
January to December 2020	976801	2480350	3197211	259940
January to December 2021	259940	2629375	2514343	374972
January to December 2022	358272	1738755	1670976	426051

18. Details of HRD activities attended by KVK staff : Nil

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

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

19.1. Inputs sold at KVK Sale counter

Sl. No.	Inputs sold	Quantity (K.G.)	Amount (Rs.)
1	Trichoderma	539	70070
2	Pseudomonas	446	57980
3	Arka microbial consortia	494	64220
4	Compost culture	26	3380
5	Boron	2	160
6	Honey	366	109800
7	Fodder COFS 31	594	297000

8	Banana special	32	6240
9	Mango special	24	4680
10	Vegetable special	20	3900
11	Ragi malt	2.5	500
12	Koranda Pickle	8	2080
13	Vegetable KIT	20 pkt	3600
14	Amla candy	37 pkt	1480
15	Rhizobium	25	3250
16	Amla adike	5 pkt	200
17	Amla Pickle	1	300
18	coconut climbing machine	1	3500
19	saame rice	15	1200
20	Gramaveeta	19 pkt	1900
Total			6,35,400

19.2.Millets processed at KVK millets processing unit.

#	***Particulars***	***Qty. (in. kg)***	***Amount (Rs.)***
1	Korale (Brown top millet)	220	1100
2	Haraka	676	3380
3	Saame	212	1060
4	Navane	20	100
Total		**1128**	**5640**